JEFFERSON COUNTY DEPARTMENT OF HEALTH
1400 SIXTH AVENUE, SOUTH • P.O. BOX 2648 • BIRMINGHAM, AL 35202-2648 • 205.933.9110 • WWW.JCDH.ORG

November 17, 2008

Ms. Gracy Danois
Source Evaluation Unit
Air, Pesticides & Toxics Management Division
U.S. Environmental Protection Agency - Region 4
Atlanta Federal Center
61 Forsyth Street
Atlanta, Georgia 30303

Dear Ms. Danois:

Enclosed please a copy of the final Title V permit for ABC Coke, A Division of Drummond Company, Inc., located at Railroad Avenue, Tarrant, Alabama 35217.

If you have any questions or comments, please advise.

Sincerely,

Wayne Studyvin, Director
Environmental Health Services

Ws/cmm

Enclosure

If you have any questions or comments, please advise.

Sincerely,

Wayne Studyvin, Director
Environmental Health Services

Ws/cmm

Enclosure

JEFFERSON COUNTY DEPARTMENT OF HEALTH

AIR POLLUTION PROGRAM

MAJOR SOURCE OPERATING PERMIT

Permittee: **ABC Coke, A Division of Drummond Company, Inc. – Coke/Utilities Plant**

Location: **Alabama Street and Huntsville Avenue**
Tarrant, Alabama 35217

Permit No: **4-07-0001-02**

Issuance Date: November 17, 2008

Expiration Date: November 17, 2013

Nature of Business: **Manufacturing of Coke and Coke By-Products, Utilities Production**

Emissions Unit No.	Emissions Unit Descriptions
001	Boiler No. 9, NSPS, Part 60, Subpart Db
002	Coke Battery No. 6 – Coking and Charging, NESHAP, Part 63, Subpart L, Subpart CCCCC
003	Coke Battery No. 5 – Coking and Charging, NESHAP, Part 63, Subpart L, Subpart CCCCC
004	Coke Battery No. 1 – Coking and Charging, NESHAP, Part 63, Subpart L, Subpart CCCCC
005	Coke By-products Recovery Plant with Gas Blanketing, NESHAP, Part 61, Subparts FF, L, and V
007	Underfire Stack No. 4 Associated with Coking Batteries Nos. 5 and 6, NESHAP, Part 63, Subpart CCCCC
008	Underfire Stack No. 1 Associated with Coking Battery No. 1, NESHAP, Part 63, Subpart CCCCC
018	South Coke Quenching Tower, NESHAP, Part 63, Subpart CCCCC
019	Boiler No. 8
020	Boiler No. 7
024	North Coke Quenching Tower, NESHAP, Part 63, Subpart CCCCC
031	Flare
032	Coke Pushing Operations of Coking Batteries Nos. 1, 5, and 6, NESHAP, Part 63, Subpart CCCCC
034	Ammonium Sulfate Manufacture, NSPS, Part 60, Subpart PP

This Permit is issued pursuant to and is conditioned upon the compliance with the provisions of the Jefferson County Board of Health Air Pollution Control Rules and Regulations, Section 18 of the Alabama Air Pollution Control Act of 1971, Act No. 269, (Regular Session, 1971), Section 22-28-16 of the Alabama Air Pollution Control Act as amended, Orders of the Jefferson County Board of Health, Orders of the Director of the Alabama Department of Environmental Management, and any applicable local, state or federal Court Order. This Permit is subject to the accuracy of all information submitted relating to the permit application and to the conditions appended hereto. It is valid from the date of issuance until the expiration date and shall be posted or kept under file at the source location described above and shall be made readily available for inspection at any reasonable time to any and all persons who may request to see it. This Permit is not transferable. Pursuant to the Clean Air Act (Act), conditions of this permit are Federally enforceable by EPA, the Jefferson County Board of Health and citizens in general. Those provisions, which are not required by the Act, are considered to be Jefferson County provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate Sections of this Operating Permit.

Wayne Studyvin

Wayne Studyvin, Director
Environmental Health Services
Approved: Michael E. Fleenor, M.D., Health Officer

JCDH

ENV-AP-107-4/08

GENERAL PERMIT CONDITIONS

In addition to compliance with Alabama Air Pollution Control Act Number 769 (Regular Session, 1971) and Act Number 612 (Regular Session, 1982) and with all applicable Air Pollution Control Rules and Regulations, the conditions which are listed below are hereby contained in and made a part of this permit:

No.	Federally Enforceable General Permit Conditions	Regulations
1	**Definitions** For the purposes of this Major Source Operating Permit, the following terms will have the meanings ascribed to in this permit: "40 CFR 60" shall be an acronym for Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised. "40 CFR 61" shall be an acronym for Part 61 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised. "40 CFR 63" shall be an acronym for Part 63 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised. "40 CFR 68" shall be an acronym for Part 68 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised. "40 CFR 82" shall be an acronym for Part 82 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised. "Act" shall mean the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. "ADEM" shall be an acronym for the Alabama Department of Environmental Management. "Air Permit" shall mean any permit issued pursuant to Chapter 2 of the Rules and Regulations. "Annual Capacity Factor" shall mean the ratio between the actual heat input to a steam generating unit from the fuel being combusted during a calendar year and the potential heat input to the steam generating unit had it been operated for 8,760 hours during a calendar year at maximum steady state design heat input capacity. "BTX" shall mean benzene, toluene, and xylene. "Bypass/Bleeder Stack" shall mean a stack, duct, or offtake system that is opened to the atmosphere and used to relieve excess pressure by venting raw coke oven gas from the collecting main to the atmosphere from a by-product coke oven battery, usually during emergency conditions. "Battery Stack" shall mean the stack that is the point of discharge to the atmosphere of the combustion gases from a battery's underfiring system. "Coke By-product Recovery Plant" shall mean any plant designed and operated for the separation and recovery of coal tar derivatives (by-products) evolved from coal during the coking process of a coke oven battery. "Coke Oven Battery" shall mean a group of ovens connected by common walls, where coal undergoes destructive distillation to produce coke. A coke oven battery includes by-product and non-recovery processes.	1.3 40 CFR 60 40 CFR 61 40 CFR 63 40 CFR 68 40 CFR 82

No.	Federally Enforceable General Permit Conditions	Regulations
1	**Definitions continued:** "COG" shall mean coke oven gas. "Coke Plant" shall mean a facility that produces coke from coal in either a by-product coke oven battery or a non-recovery coke oven battery. "Collecting Main" shall mean any apparatus that is connected to one or more offtake systems and that provides a passage for conveying gases under positive pressure from the by-product coke oven battery to the by-product recovery system. "Department" shall mean the Jefferson County Department of Health. "Emissions Unit" shall mean any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Section 112(b) of the Act. "EPA" shall be an acronym for the U. S. Environmental Protection Agency. "Emergency" shall mean any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God. These are situations that require immediate corrective action(s) to restore normal operation, and that cause the facility to exceed a technology based emission limitation set by the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include exceedances of the permit emission limitations caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. "Fossil Fuel" shall mean natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials for the purpose of creating useful heat. "Foundry Coke" shall mean coke that is produced from raw materials with less than 26 percent volatile material by weight and that is subject to a coking period of 24 hours or more. Percent volatile material of the raw materials (by weight) is the weighted average percent volatile material of all raw material (by weight) charged to the coke oven per coking cycle. "Foundry Coke By-product Recovery Plant" shall mean a coke by-product recovery plant connected to coke batteries whose annual coke production is at least 75 percent foundry coke. "Fugitive Emissions" shall mean those emissions, which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. "HAP" shall be an acronym for hazardous air pollutant. "Hazardous Air Pollutant" shall mean any air pollutant listed in or pursuant to Section 112(b) of the Act.	1.3 40 CFR 60 40 CFR 61 40 CFR 63 40 CFR 68 40 CFR 82

No.	Federally Enforceable General Permit Conditions	Regulations
1	**Definitions continued:** "In Benzene Service" shall mean a piece of equipment, other than an exhauster, that either contains or contacts a fluid (liquid or gas) that is at least 10 percent benzene by weight or any exhauster that either contains or contacts a fluid (liquid or gas) at least 1 percent benzene by weight as determined by the provisions of 40 CFR 61.137(b). The provisions of 40 CFR 61.137(b) also specify how to determine that a peice of equipment is not in benzene service. "Incinerator" shall mean an enclosed air pollution control device that uses controlled flame combustion to convert combustible materials to noncombustible gases. "In VHAP Service" shall mean that a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 10 percent VHAP by weight. "NESHAP" shall be an acronym for National Emission Standard for Hazardous Air Pollutants. "NSPS" shall be an acronym for New Source Performance Standard. "Operating Permit" shall mean any permit issued pursuant to Chapter 18 of the Rules and Regulations. "Oven" shall mean a chamber in the coke oven battery in which coal undergoes destructive distillation to produce coke. "Permittee" shall mean the holder of a permit issued by the Department. "Pushing" shall mean the process of removing the coke from the oven. Pushing begins with the first detectable movement of the coke mass and ends when the quench car enters the quench tower. "Quenching" shall mean the wet process of cooling (wet quenching) the hot incandescent coke by direct contact with water that begins when the quench car enters the quench tower and ends when the quench car exits the quench tower. "Quench Tower" shall mean the structure in which hot incandescent coke in the quench car is deludged or quenched with water. "Rules and Regulations" shall mean the Jefferson County Board of Health Air Pollution Control Rules and Regulations, as the same may be amended or revised. "Short Battery" shall mean a by-products coke oven battery with ovens of less than 6 meters in height pursuant to NESHAP, Part 63, Subpart L or less than 5 meters in height pursuant to NESHAP, Part 63, Subpart CCCCC. "Soaking" shall mean that period in the coking cycle that starts when an oven is dampered off of the collecting main and vented to the atmosphere through an open standpipe prior to pushing and ends when the coke pushing begins. "Source" shall mean any building, structure, facility, installation, article, machine, equipment, device, or other contrivance that emits or may emit any air contaminant. Any activity, which utilizes abrasives or chemicals for cleaning, or any other purpose (such as cleaning the exterior of buildings), which emits air contaminants, shall be considered a source.	1.3 40 CFR 60 40 CFR 61 40 CFR 63 40 CFR 63 40 CFR 82

	Definitions continued: "Standpipe" shall mean an apparatus on the oven that provides a passage for gases from an oven to the collecting main or to the atmosphere when the oven is dampered off the collecting main and the standpipe cap is opened. "Stationary Source" shall mean any building, structure, facility, or installation that emits or may emit any regulated air pollutant as defined in Part 18.1 of the Rules and Regulations or any pollutant listed in Appendix D of the Rules and Regulations. "Steam Generating Unit" shall mean a device that combusts any fuel or byproduct/waste to produce steam or to heat water or any other heat transfer medium. This term includes any municipal-type solid waste incinerator with a heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters as they are defined in subpart 40 CFR 60.41b. "TDS" shall be an acronym for total dissolved solids. "VHAP" shall be an acronym for volatile hazardous air pollutant. "VOC" shall be an acronym for volatile organic compound. In addition, the individual definitions as specified in each applicable rule, regulation, or standard shall be utilized where applicable.	1.3 40 CFR 60 40 CFR 61 40 CFR 63 40 CFR 68 40 CFR 82
2	**Applicability** The Major Source permitted herein shall include all of the equipment and operations of the manufacturing of coke and coke by-products, coke oven batteries, gas-fired steam generators, coke quenching towers, coke pushing controls, underfire stacks, by-pass bleeder flare, particulate emissions collection and control systems, raw materials handling operations, raw materials storage areas, product handling operations, storage tanks, in-plant vehicles, plant roads, and parking areas. The facility's particulate, visible emissions are subject to the restrictions of Chapter 6 of the Rules and Regulations. The facility's VOC/HAP emissions are subject to the restrictions of Chapter 8 of the Rules and Regulations. The facility's sulfur dioxide emissions are subject to the restrictions of Chapter 7 of the Rules and Regulations. The coke manufacturing operations are subject to the requirements of NESHAP regulations under 40 CFR 61, 40 CFR 63, and Chapters 2, 4, 6, and 8 of the Rules and Regulations. All of the boilers are subject to the requirements of Chapters 6 and 7 of the Rules and Regulations. Boiler No. 9 is subject to the requirements of NSPS regulation under 40 CFR 60 in addition to the requirements of Chapters 6 and 7 of the Rules and Regulations. The facility is subject to payment of the Operating Permit emissions fees of Chapter 16 and to the major source Operating Permit requirements of Chapter 18 of the Rules and Regulations.	Chapter 1 Chapter 2 Chapter 4 Chapter 6 Chapter 7 Chapter 8 Chapter 13 Chapter 14 Chapter 16 Chapter 18 40 CFR 61 40 CFR 63 40 CFR 68 40 CFR 82
3	**Basis for Permit** This Operating Permit is issued based on provisions contained in all existing Rules and Regulations. In the event amendments, revisions or additions are made to these Rules and Regulations, it shall be the responsibility of the permit holder (hereinafter called the permittee in this permit) to comply with such new Rules and Regulations. Additions and revisions to the conditions in this Operating Permit will be made by the Department, if necessary, to assure that the Rules and Regulations are not violated.	AL Act 769 AL Act 612
4	**Authority** Nothing in this Operating Permit or conditions appended thereto shall negate any authority granted to this Department or the Health Officer pursuant to Alabama Air Pollution Control Act No. 769 (Regular Session, 1971) and Act No. 612 (Regular Session, 1982) or any regulations promulgated thereunder.	AL Act 769 AL Act 612

No.	Federally Enforceable General Permit Conditions	Regulations
5	**Emission Reduction Plan** Upon notification by this Department, the permittee shall submit an Air Pollution Emission Reduction Plan in a format approved by this Department concerning air contaminant emissions reductions to be taken during declared episodes.	Chapter 4 18.2.8(b)
6	**Bypass of Control Equipment Prohibited** The permittee shall not bypass, without prior approval from this Department, any air pollution control device. The permittee shall not shut down any air pollution control device unless such shutdown is accompanied by the corresponding shutdown of the respective source that the device is intended to control.	1.12 18.2.4 18.2.8(a)
7	**Shutdown of Control Equipment** In the case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than 24 hours, the intent shall be reported to this Department at least 24 hours prior to the planned shutdown in accordance with the requirements of Section 1.12.1 of the Rules and Regulations.	1.12 18.2.4 18.2.8(a)
8	**Transfer** This permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another or from one person to another except as provided in Subparagraph 18.13.1(a)(5) of the Rules and Regulations.	18.2.6 18.13.1(a)(5)
9	**Compliance Source Emissions Testing** The Department at any time may require a source emissions test. The methods for such testing shall be in accordance with procedures established by 40 CFR 51, 40 CFR 60, 40 CFR 61, and 40 CFR 63, as the same may be amended or revised.	1.9 18.2.5 18.2.8 40 CFR 61 40 CFR 63
10	**Notice of Testing** The permittee shall notify this Department in writing at least 60 calendar days prior to the actual conduction of any source emissions test. This notice shall state the source to be tested, the proposed time of the test, the testing date(s), and the proposed testing methods and procedures. Refer to 40 CFR 63.7(b).	1.9.1 18.2.5 40 CFR 63
11	**Provisions for Testing** The permittee shall provide each point of emission with sampling ports, ladders, stationary platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by 40 CFR 51, 40 CFR 60, 40 CFR 61, and 40 CFR 63.	1.10.3 18.2.5 18.2.8(c)
12	**Test Results** The permittee shall submit the results of all emissions tests in duplicate in bound copies to this Department within a time period specified by this Department; however, not to exceed 4 weeks from the test completion date.	18.2.8(c) 40 CFR 63
13	**Operation and Maintenance of Controls** A. The permittee shall equip each particulate matter control device with a pressure differential measuring device to measure the pressure drop across the filter media in the control device. This device shall be installed in a location that is easily accessible for inspection by personnel of this Department. B. All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Written procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established and submitted to this Department for approval. C. The permittee shall conduct routine inspections on all control equipment. All inspections results and repair work performed on the pollution control device shall be recorded. These records shall be kept in a permanent form suitable for inspection in a format approved by this Department and shall be retained for 5 years after the date of the record.	18.2.8(a) 40 CFR 61 40 CFR 63

No.	Federally Enforceable General Permit Conditions	Regulations
14	**Fugitive Dust** The major source permitted herein is subject to and shall comply with the requirements under Part 6.2 of the Rules and Regulations. The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, conveyed, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following: A. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land; B. Application of asphalt, oil, water, or suitable chemicals on dirt roads, material stock piles, and other surfaces which create airborne dust problems; and C. Installation and use of hoods, fans, and fabric filters (or other suitable control devices) to enclose and vent the handling of dust materials. Adequate containment methods shall be employed during sandblasting or other similar operations. The permittee shall not cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate. When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any rule or regulation, the Health Officer may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.	6.2 18.2.8(a)
15	**Monitoring Records** Records of all required monitoring shall be retained for a period of 5 years from the date of measurement including all calibration and maintenance records and all original strip-chart recordings and copies of all reports.	1.9 18.5.3(b)(1)(vii)
16	**Monitoring Reports** Reports of required monitoring shall be submitted to the Department by January 31 and July 31 of each year unless notified otherwise. For such semi-annual reports required for the purposes of demonstrating compliance with any annual rolling averages included in this permit, the compliance period shall be the 6-months immediately preceding the reporting date. All instances of deviations from permit requirements must be clearly identified in such reports. A responsible official as defined in Paragraph 18.1.1(y) of the Rules and Regulations must sign all reports.	1.9 18.1.1(y) 18.5.3(c)(1) 40 CFR 63
17	**Deviations** Deviations from permit requirements shall be reported within 2 working days of such deviations, including those attributable to upset conditions, the probable cause of said deviations and any corrective actions or preventive measures that were taken.	18.5.3(c)(2) 40 CFR 63
18	**Severability** In case of legal challenge to any portion or permit condition of this Operating Permit, the remainder of the permit conditions shall continue in force.	18.5.5
19	**Compliance** The major source (permittee) permitted herein must comply with all conditions of the Rules and Regulations. Noncompliance with a permit will constitute a violation of the Act and the Rules and Regulations and may result in an enforcement action; including but not limited to, permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.	18.5.6
20	**Compliance Defense** The permittee shall not use as a defense in an enforcement action, that maintaining compliance with permit conditions or the Rules and Regulations would have required halting or reducing the permitted activity.	18.5.7

No.	Federally Enforceable General Permit Conditions	Regulations
21	**Termination for Cause** This Operating Permit may be modified, revoked, reopened and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance or termination, or of a notification of a planned change or anticipated noncompliance will not stay any permit condition.	18.5.8
22	**Property Rights** No property rights of any sort or any exclusive privilege are conveyed through the issuance of this Operating Permit.	18.5.9
23	**Requests for Information** The permittee shall furnish to the Department within 30 days, or for such other reasonable time as the Department may set, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon receiving a specific request, the permittee shall also furnish to the Department copies of records required to be kept by the permit.	18.5.10
24	**Payment of Fees** The permittee must have paid all fees required by the Rules and Regulations or this Operating Permit is not valid. Payment of Operating Permit fees required under Part 16.4 of the Rules and Regulations shall be made on or before the date specified under Section 16.5.1 of the Rules and Regulations of each year. Failure to make payment of fees within 30 days of the specified date shall cause the assessment of a late fee of 3 percent (3% of the original fee) per month or fraction thereof.	16.4 16.5 18.5.11
25	**Economic Incentives** No permit revision shall be required under any approved economic incentives, marketable permit emissions trading and other similar programs or processes for changes that are provided for in the Operating Permit.	18.5.12
26	**Alternative Operating Scenarios** If the permittee has applied for alternate operating scenarios and the Department deems the alternative operating scenarios identified in the application for this Operating Permit acceptable, then the permittee shall: A. Record the change from one operating scenario to another in a log at the permitted facility. The recording of the change shall be made contemporaneously with the change, and the log shall contain the scenario under which the facility is currently operating. B. Ensure that terms and conditions of each alternative operating scenario meet all of the requirements of this Operating Permit, as well as, the Rules and Regulations.	18.5.13
27	**Trading of Emissions Increases and Decreases** If specifically requested by the applicant (permittee), the Department may authorize the trading of emissions increases and decreases in the permitted facility solely for the purposes of complying with a federally enforceable emissions cap that is established in the permit independent of otherwise applicable requirements, to the extent that the applicable requirements provide for trading such increases and decreases without a case-by-case approval of each emissions trade. The terms and permit conditions in the Operating Permit shall comply with the requirements in Section 18.5.14 of the Rules and Regulations.	18.5.14 Appendix F
28	**Changes** Certain changes (per Section 502 (B)(10) of the Act) can be made to this Operating Permit without a revision if no modification as defined in the Rules and Regulations would occur and the changes do not exceed the emissions allowed under this permit provided that a notice is sent to the Department 7 days in advance of the change.	18.13.2

No.	Federally Enforceable General Permit Conditions	Regulations
29	**Entry and Inspections** The permittee shall allow the Department, ADEM, EPA, or authorized representative upon presentation of credentials and other documents that may be required by law to conduct the following: A. Enter upon the permittee's premises where a source is located or emissions related activity is conducted or where records are kept pursuant to the permit conditions; B. Review and/or copy at reasonable times any records kept pursuant to the permit conditions; C. Inspect at reasonable times any facilities, equipment, practices or operations required by the permit; and D. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements.	18.2.9(d) 18.7.2
30	**Compliance Certification** A compliance certification shall be submitted annually within 30 days of the anniversary of the initial issue date. The permittee shall provide a means for monitoring the compliance of its air pollution sources with the emissions limitation, standards and work practices listed or referenced within this permit. A. The compliance certification shall include the following: 1. The identification of each term or condition of this permit that is the basis of the certification; 2. The compliance status; 3. Whether compliance has been continuous or intermittent; 4. The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with the Rules and Regulations; and 5. Such other facts as the Department may require to determine the compliance status of the source. B. The compliance certification shall be submitted to the following 2 agencies: Jefferson County Department of Health Air and Radiation Protection Division P.O. Box 2648 Birmingham, AL 35202-2648 EPA Region IV Air & EPCRA Enforcement Branch 61 Forsyth Street SW Atlanta, GA 30303-8909	18.4.9 18.7.1 18.7.5(c) 18.7.5(d) 18.7.5(e)
31	**Reopening for Cause** Under any of the following circumstances, this Operating Permit will be reopened prior to the expiration of the permit: A. Additional applicable requirements under the Clean Air Act become applicable to the permittee with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirements. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire. B. Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into this permit. C. The Department, ADEM, or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. D. The Administrator, ADEM, or the Department determines that this permit must be revised or revoked to assure compliance with the applicable requirements.	18.13.5

No.	Federally Enforceable Genral Permit Conditions	Regulations
32	**Emergencies** A. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emissions limitation under the Operating Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. B. Exceedances of emission limits during emergencies (as defined above) at a facility may be exempted from being violations provided that one or more of the following actions occur: 1. The permittee can identify the cause(s) of the emergency; 2. At the time of the emergency, the permitted facility was being properly operated; 3. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the Operating Permit; 4. The permittee submitted notice of the emergency to the Health Department within 2 working days of the time when the emission limitations were exceeded due to the emergency. Such notice shall include those deviations attributable to upset conditions as defined in the permit, the probable cause of said deviations, and any corrective actions or preventative measures that were taken. Within 5 working days of the emergency, a written documentation of what was reported in the notice of the emergency shall be submitted to the Department; and 5. The permittee immediately documented the emergency exceedance in an "Emergency Log," which shall be maintained for 5 years in a form suitable for inspection upon request by a representative of the Department. C. This provision is in addition to any emergency or upset provision contained in any applicable requirement. D. An emergency constitutes an affirmative defense.	18.11.2
33	**Nothing in this Operating Permit Shall Alter or Affect the following:** A. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that Section; B. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; C. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act; or D. The ability of EPA to obtain information from a source pursuant to Section 114 of the Act.	18.10.3
34	**Duration, Expiration, and Renewal of Operating Permit** A source's right to operate shall terminate upon the expiration of this Operating Permit unless a timely complete renewal application has been submitted at least 6 months, but not more than 18 months, before the date of expiration or the Department has taken final action approving the source's application for renewal by the expiration date. The expiration date of this Operating Permit is printed on the first page of the permit. Major Source Operating Permits are issued for a fixed period of 5 years except as provided under Paragraph 18.5.2(b) of the Rules and Regulations.	18.4.3 18.5.2 18.12.2
35	**Display and Availability of Permit** The permittee shall keep this Operating Permit under file or on display at all times at the site where the source is located and shall make the permit available for inspection by any and all persons who may request to see it.	18.2.2

No.	Federally Enforceable General Permit Conditions	Regulations
36	**Minor Permit Modifications** Minor permit modifications procedures may be used only for those permit modifications that: A. Do not violate any applicable requirement; B. Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit; C. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis; D. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include: 1. A federally enforceable emissions cap assumed to avoid classification as a Modification under any provision of title I of the Act; and 2. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act. E. Are not modifications under any provision of title I of the Act; and F. Are not required by Part 18.12 of the Rules and Regulations to be processed as a significant modification.	18.13.3
37	**Acceptance of Permit** The permittee is required to bring the operation of a source within the standards of Paragraph 18.2.8(a) of the Rules and Regulations. Commencing construction or operation of the source shall be deemed acceptance of all conditions specified. An Operating Permit with revised conditions may be issued upon receipt of a new application if the permittee demonstrates that the source can operate within the standard of Paragraph 18.2.8(a) of the Rules and Regulations under the revised conditions.	18.2.4 18.2.8(a)
38	**Construction Not In Accordance with Applications** If the source permitted herein has not been constructed in accordance with the Operating Permit application and if the changes noted are of a substantial nature in that the amount of air contaminants emitted by the source may be increased or in that the effect is unknown, then the Operating Permit shall be revoked. No further application for an Operating Permit shall be accepted until the source has been reconstructed in accordance with the Operating Permit or until the permittee has proven to the Department that the change will not cause an increase in the emission of air contaminants.	18.2.4(e)
39	**Revocation of Operating Permit** This Operating Permit may be revoked for any of the following reasons: A. Failure to comply with any condition of the Operating Permit; B. Failure to establish and maintain such records, make such reports, install, use and maintain such monitoring equipment or methods; and sample such emissions in accordance with such methods at such locations, intervals and procedures as may be prescribed in accordance with Section 1.9.2 of the Rules and Regulations; C. Failure to comply with any provisions of any Departmental Administrative Order issued concerning the permitted stationary source or facility; D. Failure to comply with the Rules and Regulations; or E. For any other cause, after a hearing which establishes, in the judgement of the Department, that continuance of the Operating Permit is not consistent with the purpose of the Act or the Rules and Regulations.	1.9.2 18.2.9

No.	Federally Enforceable General Permit Conditions	Regulations
40	**Duty to Supplement or Correct an Application** The permittee shall submit any additional information to the Department to supplement or correct an application promptly after becoming aware of the need for additional or corrected information. The permittee must supply to the Department additional information concerning any new requirements, which have become applicable after a complete application has been filed but before a draft permit is released.	18.4.7
41	**Permit Shield** If the permittee has requested a permit shield in the permit application and the Department has granted the permit shield, the permit shield under Part 18.10 of the Rules and Regulations shall not extend to minor permit modifications.	18.10 18.13.3(f)
42	**Significant Modifications** Modifications that are significant modifications under the PSD (Part 2.4) or nonattainment (Part 2.5) regulations or are modifications under the NSPS (40 CFR 60) or NESHAPS (40 CFR 61 & 63) regulations must be incorporated in the Operating Permit using the requirements for sources initially applying for an Operating Permit, including those for applications, public participation, review by affected States, review by ADEM, and review by EPA, as described in Parts 18.4 and 18.15 of the Rules and Regulations.	18.4 18.13.4 18.15
43	**Schedule of Compliance** A. The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance. B. The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this Operating Permit.	18.4.8(h) 18.7.3
44	**Progress Reports** If any air pollution source owned or operated by the permittee is not in compliance with the emissions limitations, standards and work practices listed or referenced within this permit, the permittee shall submit a progress report for that air pollution source. The first schedule of compliance shall be submitted within 3 months after the Operating Permit issuance date or within 3 months of the permittee or Department determining that the air pollution source is not in compliance. Subsequent reports shall be submitted every 6 months following the initial report. The progress reports shall contain the following: A. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and/or dates when such activities, milestones or compliance were achieved. B. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.	18.4.8(h) 18.7.4
45	**Abatement of Obnoxious Odors** This Operating Permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Department inspectors, measures to abate the odorous emissions shall be taken upon a determination by this Department that these measures are technically and economically feasible.	6.2.3
46	**New Air Pollution Sources** A new permit application must be made for new sources, replacements, alterations, or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.	2.1 18.4.2 18.13.3 18.13.4 40 CFR 63
47	**Maximum Achievable Control Technology Standards (MACT)** The permittee shall be subject to and comply with any or all future Federal MACT Standards that may apply to this facility immediately from the effective date of the standards. The permittee shall notify the Department in writing within 2 working days of becoming subject to a federal MACT standard pursuant to Section 112 of the Act, as the same may be amended or revised. Where applicable, the Federal MACT Standards will supersede Department requirements upon promulgation.	2.1.3 14.5 18.4.8(h)(3) 18.7.6 40 CFR 63 Act 112(i)(3)

No.	Federally Enforceable General Permit Conditions	Regulations
48	**Prevention of Accidental Releases** If the permittee has any substance listed pursuant to Paragraph 3 of Section 112(r) stored within the facility permitted herein, the permittee shall comply with the requirements of Section 112(r) of the Act to prevent accidental releases of any substance listed pursuant to Paragraph 3 of Section 112(r), as the same may be amended or revised, or any other extremely hazardous substance.	112 (r) 40 CFR 68
49	**Housekeeping Requirements** The permittee shall not cause or allow the disposal of waste VOC/HAP materials in sewers, open containers, or in any manner that would result in vaporization to the atmosphere.	2.1.3 2.1.1(g)
50	**Title VI Requirements (Refrigerants)** Any facility having appliances or refrigeration equipment, including air conditioning equipment, which use Class I or Class II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR 82, Subpart A, Appendices A and B, shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR 82, Subpart F. A. No person shall knowingly vent or otherwise release any Class I or Class II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR 82, Subpart F. B. The responsible official shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA and the Department as required.	18.1.1(e)(10) 18.1.1(w)(4) 40 CFR 82
51	**Asbestos Demolition and Renovation** Asbestos demolition and renovation activities are subject to the National Emission Standard for Asbestos in 40 CFR 61, Subpart M. To determine the applicable requirements of the standard, the permittee shall inspect the affected part of the facility permitted herein where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable asbestos containing materials, prior to commencement of the demolition or renovation operations. The permittee shall comply with all applicable sections of the standard, including notification requirements, emission control and waste disposal procedures. The permittee shall ensure that anyone performing asbestos related work at the facility permitted herein is trained and certified according to the ADEM's regulations for Asbestos Contractor Certification.	14.2.12 40 CFR 61
52	**Notification of Violations** The permittee shall submit a report to the Department within 2 working days after determining any deviations, violations or malfunctions of emissions or production permit restrictions and any Rule or Regulation. The report shall include the probable cause of the deviation, violation or malfunction and the corrective actions or preventive measures taken.	2.1.1(g) 2.1.3 18.5.3(c)(2)
53	**Applicability of Subpart A of 40 CFR 60 (NSPS Requirements)** The general provisions in Subpart A of 40 CFR 60 are applicable to the facility permitted herein affected by the NSPS requirements in 40 CFR Parts 60.	40 CFR 60
54	**Applicability of Subpart A of 40 CFR 61 and 63 (NESHAP Requirements)** The general provisions in Subpart A of 40 CFR 61 and 40 CFR 63 define requirements applicable to the facility permitted herein affected by the applicable NESHAP requirements in 40 CFR Parts 61 and 63.	40 CFR 61 40 CFR 63
55	**Work Practice Plan (NESHAP Requirement)** The permittee shall submit a written work practice plan to the Department for review and approval as part of the permit application for the Title V Major Source Operating Permit.	40 CFR 63 63.306
56	**Recordkeeping Requirements (NESHAP Requirement)** The permittee must comply with the following recordkeeping requirements as required by Section 63.10(b) of the general provisions in Subpart A of 40 CFR 63, including all notifications and reports.	40 CFR 63

57	**Annual Recordkeeping and Reporting (JCDH Requirement)** The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the source permitted herein: A. For each battery, the total quantity in tons per year of raw materials coke and/or breeze charged, and any other material; B. For each battery, the total quantity in tons of coke produced; specify amounts in tons for both furnace and foundry; C. For each battery, the total quantity in tons of coke oven underfire gas combusted; D. Foundry and furnace coking times (in hours); E. Amount of coke oven gas flared; F. For each of the boilers Nos. 7, 8, and 9, where applicable, the amounts of coke oven gas and natural gas combusted; G. For all battery components types (lids, offtakes, & doors), the annual average leaking percentages; H. Regarding coal handling, in addition to the number of executions performed for each of the indicated processes, the total amounts in tons processed: - loading/unloading, - conveyor transfer, - crushing transfer, and - emissions control features; I. Regarding coke (furnace and foundry) handling, in addition to the number of executions performed for each of the indicated processes, the total amounts in tons processed: - loading/unloading, - screening, - conveyor transfer, - emissions control features; J. Regarding coal/coke storage piles, for each pile, the acres of storage and the number of active days, Indicate whether pile is coal or coke. Specify any emissions control features. K. For vehicular traffic, for each equipment type (e.g., light truck, forklift, dump truck, front end loader, six-wheel vehicle contract coal/coke trucks), list the following: - loaded and unloaded weights (tons), - number of wheels per equipment types, - vehicle miles traveled one way, - silt content percentage of unpaved road, - road silting (g/m2), - number of days with/precipitation above 0.01 inches, and - surfactant usage (gal/sq. yard/mo.); L. For the each emissions unit type associated with the by-products recovery facility (tar decanters, tar storage tanks, tar-intercepting sumps, flushing liquor circulation tanks, light-oil sumps, light-oil condensers, light-oil decanters, wash-oil decanters, wash-oil circulation tanks, naphthalene processing, final coolers, final cooler cooling towers, benzene storage tanks, BTX storage tanks, light-oil storage tanks, excess ammonia-liquor storage tanks, pumps, valves, exhausters, pressure relief devices, sampling connection systems, closed-vent systems, open-ended valves or lines, flanges, and other connectors, all of which are intended to operate in VOC or benzene service), list the number of emissions unit types. M. The quantity of all of the following fuels combusted and assign actual usage of fuels to the emissions unit where combusted: i. Coke Oven Gas in million cubic feet, and ii. Natural gas in million cubic feet; N. For each battery, the total number of ovens not captured during pushing; and O. The actual emissions of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations including all individual HAP emissions. The emissions shall be assigned to the emissions unit where the emissions occurred. Fugitive emissions shall be included in the report. The fugitive emissions shall include paved and unpaved road dust emissions. The vehicle miles driven on the paved and unpaved roads shall be included.	1.9 2.1.3 8.26 40 CFR 61 40 CFR 63

58	**Emission Factor Utilization** Regarding future Title V emissions, ABC Coke shall utilize emission factors for coke production as listed in the Settlement Agreement (CV 0001852) entered into between the Jefferson County Department of Health and ABC Coke (May 1, 2000). Table 1 of the Settlement Agreement shall be utilized until more accurate data is made available by ABC Coke and approved in advance by the Jefferson County Department of Health and/or the USEPA.	2.1.3

Emissions Unit Operating Permit Summary

Emissions Unit No.: 001

Company: ABC Coke

Source Description: 174 MMBTU/Hr Nebraska Designated Boiler No. 9 (This boiler is subject to NSPS, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units)

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Particulate Matter (PM)	24.81 lb/hr	Section 2.1.3
Sulfur Dioxide (SO_2)	1.20 lb/MMBTU of Heat Input	Subpart Db
Sulfur Dioxide (SO_2)	193.30 lb/hr	NSR
Carbon Monoxide (CO)	NA	NA
Volatile Organic Compounds (VOC)	NA	NA

Pollution Control Device: None

Continuous Emission Monitors: NO_x, and O_2 or CO_2

Continuous Compliance Determiner: Daily Recordkeeping of Fuel Combusted
Maximum Heat Input Restricted to 174 MMBTU/hour
Coke Oven Gas Restricted to 5957 MMCF/year for Boilers 7, 8, 9, and the Flare
Restricted to Coke Oven Gas/Natural Gas Combustion

Title V Monitoring: Daily Visible Emissions Observation of Boiler Stack
Daily Fuel Combustion Metering (± 1% Accuracy)
Monthly Sampling & Testing of Fuel Sulfur Content (COG)
Monthly Sampling & Testing of Fuel Heat Content (COG)

EPA Reference Test Methods: 1, 2, 3, 4, 5, 6C, 7, 7E, 9, 10, 18, 25, 25A of 40 CFR 60, Appendix A

Reporting Requirements: Permit Condition Nos. 14 and 17

Applicable Regulations: Sections 2.1.3, 6.1.1 and 7.1.1
Parts 6.3 and 18.5
Chapters 2, 6, 7, 16 and 18

No.	Permit Conditions for Emissions Unit No. 001	Regulation
	Section 1 – Applicability	
1	Applicability The Emissions Unit, 174 MMBTU/hour boiler, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including ducts, breechings, fuel-feeding equipment, ash removal equipment, combustion controls, stacks and chimneys, and the combustion fuels used. The emissions unit is subject to Part 6.1, entitled "Visible Emissions," of the Rules and Regulations. The emissions unit is subject to the particulate emission rate allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Rules and Regulations. The emissions unit is subject to Part 7.1, entitled "Fuel Combustion," of the Rules and Regulations. The emissions unit is subject to Chapter 18 of the Rules and Regulations.	2.1.3 6.1 6.3 7.1 Chapter 18
	Section 2 -- Emission, Equipment or Production Requirements and Limitations	
2	Subpart Db The Emissions Unit 001 permitted herein is subject to the requirements as listed in Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units) 40 CFR60.	2.1.3 6.1.1 18.5 40 CFR 60
3	Visible Emissions Restriction The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60.	2.1.3 6.1.1 18.5
4	Subpart Db-Opacity Monitor Waiver The emissions unit is subject to the opacity standard promulgated at 40 CFR 60, 60.43b(f) and an opacity monitoring requirement promulgated at 60.48b(a) of 40 CFR 60. As an alternative to installing, certifying, operating, and maintaining a continuous opacity monitoring system (COMS), the permittee shall perform daily visible emission observations to satisfy the opacity monitoring requirements in Subpart Db. The conduction of visible emission observations shall be an acceptable alternative to a COMS under the following conditions: A. The permittee shall make visible emission observations in accordance with EPA Method 22 on a daily basis. The minimum observation time shall be 20 minutes per day; B. If any visible emissions are detected during the Method 22 observation period, the permittee shall make 20 minutes of additional observations using EPA Method 9; C. If any individual 15-second Method 9 readings exceed 20% opacity, the permittee shall continue making readings until the opacity either drops below 20% for 8 consecutive 15-second readings or a violation of the subpart opacity limit is confirmed; and D. When violation(s) of the applicable opacity standard are identified, the permittee shall take immediate steps to identify the cause of the violation and bring the boiler back into compliance.	40 CFR 60, Subpart Db

5	Particulate Emissions Restriction The Emissions Unit permitted herein is subject to and shall comply with the particulate emission rate restriction that is allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Rules and Regulations. The permittee shall not cause or allow the emissions of particulate matter from the fuel-burning equipment permitted herein in excess of 0.142 pounds per million BTU of heat input (at 174 MMMBTU/hr) as determined by EPA Reference Method 5 of Appendix A of 40 CFR 60, July 1, 2008, as the same may be amended or revised. For Title V monitoring requirements, the permittee shall demonstrate compliance with this emission limit by certifying to the Department in writing that only coke oven gas and natural gas is combusted in the emissions unit. This written certification shall be submitted biennially.	2.1.3 6.3 18.5
6	Sulfur Oxides Emissions Restriction The Emissions Unit permitted herein is subject to and shall comply with the sulfur oxide emission rate restriction that is allowed under Section 7.1.1 of the Rules and Regulations. The permittee shall not cause or allow the emissions of sulfur oxides, measured as sulfur dioxide, from the fuel-burning equipment permitted herein in excess of 1.2 pounds per million BTU of heat input as determined by EPA Reference Method 6C of Appendix A of 40 CFR 60, July 1, 2008, as the same may be amended or revised. For Title V monitoring requirements, the permittee shall collect monthly samples of coke oven gas and analyze the coke oven gas for sulfur content by weight. The permittee shall also determine the heat content of the coke oven gas sampled. The emissions unit is restricted to combusting coke oven gas and natural gas.	2.1.3 7.1.1 18.5
7	Combustion Fuel Restriction The Emissions Unit permitted herein is restricted to combusting coke oven gas/natural gas. This restriction shall be demonstrated by recording and maintaining a record of the amount (within ± 1% accuracy) of each fuel combusted each calendar day.	2.1.3 18.5
8	Heat Input Restriction The Emissions Unit permitted herein shall not exceed 174,000,000 BTUs per hour of heat input. This restriction shall be demonstrated by recording and maintaining a record of the amounts (within ± 1% accuracy) of fuel combusted and time operated each calendar day.	2.1.3 18.5
9	New Source Review Combustion Fuel Restriction The permittee shall not cause or allow the Emissions Unit Nos. 001, 020, 019, and 031 (Boiler Nos. 7, 8, 9, and Flare) to exceed combusting 5,957 million (MM) cubic feet per year of coke oven gas in any 12-month period based on an annual rolling average as defined in Part 1.3 of the Rules and Regulations. This restriction shall be demonstrated by recording and maintaining a record of the amount (within ± 1% accuracy) of each fuel combusted in each boiler and time each boiler operated per calendar day.	2.1.3 18.5
	Section 3 -- Compliance and Performance Test Methods and Procedures	Regulation
10	Test Methods and Procedures The permittee shall determine compliance with the particulate emissions, sulfur oxide emissions, and visible emissions restrictions of this permit by the following EPA's reference methods under 40 CFR 60, Appendix A, July 1, 2008, as the same may be amended or revised: Method 1: Sample and Velocity Traverses Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate Method 3: Gas Analysis for Carbon Monoxide, Oxygen, Excess Air, and Dry M. W. Method 4: Determination of Moisture Content in Stack Gases Method 5: Determination of Particulate Emissions Method 6C: Determination of Sulfur Dioxide Emissions Method 7: Determination of Nitrogen Oxide Emissions Method 9: Visual Determination of the Opacity of Emissions Tutwiler Method: Sulfur Content (H_2S, hydrogen sulfide) in Gas Mixtures Calorimeter: Determination of Heat Content of Fuels in BTU per Cubic Foot	2.1.3 40 CFR 60

	Section 4 – Continuous Emission Monitoring -CEMS	
11	Subpart Db-CEMS The permittee shall install, calibrate, maintain, and operate CEMS for measuring NO_x concentrations and either O_2 or CO_2 and shall record the output of the system in accordance with Section 60.48b of the subpart.	40 CFR 60 Subpart Db
	Section 5 -- Recordkeeping and Reporting Requirements	
12	NSPS Notification, Reporting, and Recordkeeping Requirements Where applicable, the permittee shall comply with the notification, reporting, and recordkeeping requirements of Subpart Db of 40 CFR 60.	40 CFR 60, Section 60.49b
13	Startup, Shutdown, and Malfunction Records The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the permitted unit herein.	2.1.3 18.5.3
14	Combustion Fuel Restriction Records In accordance with the combustion fuel restrictions listed in this permit, the permittee shall keep a monthly record of the amount (within ± 1% accuracy) of each fuel combusted and the time of operation per calendar day for the permitted unit herein.	2.1.3 18.5.3
15	Department Required Annual Report Requirement The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation. The record of operational hours shall differentiate combusting coke oven gas and natural gas. B. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations; C. The quantity of coke oven gas and natural gas burned in million cubic Feet; and D. The average monthly total sulfur content and heat content of the coke oven gas.	1.5.15 2.1.3 18.5.3

Emissions Unit Operating Permit Summary

Emissions Unit No.: 002

Company: ABC Coke

Source Description: Coke Oven Battery No. 6
Charging, Coking, Soaking, Oven Doors, Lids, Offtake Systems, Collecting Mains, Bleeder Flares, and Emergency Bleeder Flares

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used: COG

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standards
Visible Emissions (VE)	20% Opacity	Part 6.1
Visible Emissions (VE)	20% Opacity – Charging	Section 6.9.3
Coke Battery Emissions	4.0% leaking coke oven doors for each short by-product coke oven battery 0.4 % leaking topside port lids 2.5 % leaking offtake systems 12 seconds of visible emissions per charge	40 CFR 63
Particulate Emissions	15% leaking coke oven doors 5 % leaking topside port lids 10 % leaking offtake systems	Part 6.9
Visible Emissions (VE) Hazardous Air Pollutants (HAP)	No visible emissions from emergency bypass/bleeder stack flares, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours	40 CFR 63
Hazardous Air Pollutants (HAP)	Installation and operation of a emergency bypass/bleeder stack flare venting to atmosphere with a minimum of 98% destruction control	40 CFR 63
Volatile Organic Compounds (VOC)	95 % removal of VOC from coke oven gas bleeder (venting surplus COG) control system prior to discharge to the atmosphere	Part 8.27
Hazardous Air Pollutants (HAP)	Charging, soaking, oven doors, lids, offtake systems, collecting mains, emergency bleeder flares	40 CFR 63 LAER Extention Track, Subpart CCCCC

Pollution Control Device: Flares

Continuous Emission Monitors: None

EPA Reference Test Methods: Method 9, Method 22, Method 303, Appendix A (40 CFR 60)

Reporting Requirements: See Section 5, herein

Applicable Regulations: Section 1.5.15, Section 2.1.3, Part 6.1, Section 6.9.3, Section 6.9.5, Section 6.9.6, Part 6.9, Part 8.27, Section 18.5.3, Part 18.5, 40 CFR 60, 40 CFR 63

No.	Permit Conditions for Emissions Unit No. 002	Regulation
	Section 1 – Applicability	
1	Applicability Visible Emissions Restriction The Emissions Unit No. 002 permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60 minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, July 1, 2008, as the same may be amended or revised.	6.1 18.5 40 CFR 60
2	Subpart L The Emissions Unit No. 002 herein is subject to the requirements as listed in Subpart L (National Emissions Standards for Hazardous Air Pollutants for Coke Ovens) of Part 63 of Title 40 of the Code of Federal Regulations.	40 CFR 63, 63.300
	Section 2 – Emission, Equipment, Production Requirements, Limitations and Work Practice Standards	
3	Control of Particulate Matter Emissions Unit 002 permitted herein is subject to and shall comply with the requirements under Part 6.9, "Control of Particulate Emissions – Coke Ovens," of the Rules and Regulations.	6.9
4	Coke Oven Gas Bleeder (Venting Surplus COG) Each coke oven gas bleeder shall be equipped with a closed vent system capable of capturing and transporting excess gas to a control device. All coke oven gas from the closed vent system shall be passed through the said control device which removes at least 95% percent of the VOC from such gas before it is discharged to the atmosphere. Owner or operators of control devices used to comply with this requirement shall monitor/test such control devices to ensure that they are operated and maintained in conformance with their design specifications. Closed vent systems shall be monitored to determine compliance with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, and, by visual inspections, quarterly, and at other times requested by the Health Officer.	8.27
5	Percent Leaking Door Restriction The number of doors leaking as determined pursuant to Method 303 (standards for compliance date extension) shall not exceed 4.0% on a 30-day rolling average basis. In addition, at any given time, the number of doors leaking shall not exceed 15 % of the total doors ovens in operation.	6.9.6 40 CFR 60 40 CFR 63
6	Percent Leaking Lids Restriction The number of topside lids leaking as determined pursuant to Method 303 (standards for compliance date extension) shall not exceed 0.4% on a 30-day rolling average basis. In addition, at any given time, the number of topside lids leaking shall not exceed 5% of the total lids on ovens in operation.	6.9.5 40 CFR 60 40 CFR 63
7	Percent Leaking Offtake System Restriction The number of offtake system leaking as determined pursuant to Method 303 (standards for compliance date extension) shall not exceed 2.5% on a 30-day rolling average basis. In addition, at any given time, the number of offtake systems leaking shall not exceed 10 % of the total offtake systems on ovens in operation.	6.9.5 40 CFR 60 40 CFR 63
8	Charging Visible Emissions Time Restriction There shall be no more than 12 seconds of visible emissions per charge as determined pursuant to Method 303 on a 30-day rolling average basis.	40 CFR 63

9	Charging Visible Emissions Opacity Restriction At any time, there shall be no visible emissions during the charging cycle from charging holes or the larry car of any battery with an opacity which is greater than 20% except for an average period or periods not to exceed 3 minutes of any consecutive 60 minutes on batteries with less than 70 ovens nor more than 4 minutes of any consecutive 60 minutes on batteries with 70 ovens or more. Visible emissions observations shall be conducted pursuant to Method 22 of 40 CFR 60. The procedures of Subpart L, including data collected by Method 303, are consistent with the State Implementation Plan (SIP) for visible emissions opacity observations and can be used to enforce the SIP. Therefore, the inspection conducted using Method 303 will be used by this Department for compliance assurance with Section 6.9.3 of the Rules and Regulations.	6.9.3
10	Emergency Bypass/Bleeder Flares Emissions Limitation There shall be no emissions from any emergency bypass/bleeder flares, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Compliance with this requirement shall be determined by using Method 22 in Appendix A of 40 CFR 60 with an observation period of 2 hours.	40 CFR 60 40 CFR 63
11	Subpart L – Standards for Collecting Mains A. The owner or operator of a by-product coke oven battery shall inspect the collecting main for leaks at least once daily according to the procedures in Method 303. B. The owner or operator shall document any leak observed, and implement a collecting main repair within the time period allowed by the subpart.	40 CFR 63, 63.308
12	Subpart L - Work Practice Standards The work plan required to be submitted, implemented and adhered to in accordance with 63.300 of Subpart L of 40 CFR 63 shall be implemented and adhered to on a continuous basis. The plan shall be designed to achieve compliance with visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations.	40 CFR 63, 63.306, 63.307, and 63.309(h)(2)
13	Subpart L – Implementation of Work Practice Plans The owner or operator of a coke oven battery subject to visible emissions limitations shall implement the provisions of the work practice plan pertaining to a particular emission point following the second independent exceedance of the visible emissions limitation for the emission point in any consecutive 6-month period.	40 CFR 63, 63.306
14	Subpart L - Start-Up, Shutdown, and Malfunctions (SSM) Each owner or operator of a coke oven battery shall develop, according to 63.310(c) of 40 CFR 63, a written startup, shutdown, and malfunction plan that describes procedures for operating the battery, including associated air pollution control equipment, during a period of a startup, shutdown, or malfunction in a manner consistent with good air pollution control practices for minimizing emissions, and procedures for correcting malfunctions process and air pollution control equipment. If the owner or operator demonstrates, to the satisfaction of the Administrator, that a startup, shutdown or malfunction has occurred, then an observation occurring during such startup, shutdown or malfunction shall not: A. Constitute a violation of relevant requirements of this subpart; and B. Be used for in any compliance determination under Section 63.309 of 40 CFR 63	40 CFR 63, Paragraph 63.310(i)

15	Subpart L – Notification of Start-Up, Shutdown, and Malfunction (SSM) In order for provisions of 63.310(i) of 40 CFR 63 to apply with respect to an observation for a particular day, notification of a startup, shutdown, or a malfunction shall be made by the owner or operator: A. If practical to the certified observer, if present during the occurrence; or To the enforcement agency, in writing within 24 hours of the occurrence B. Within 14 days from the notification as contained within condition 2 of this emissions unit, describing in detail the startup, shutdown or malfunction	40 CFR 63, 63.310
16	Oven Maintenance A. All ovens shall be maintained in good condition to promote complete coking of coal. B. All coke oven cracks are to be sealed as soon as practicable after they are detected. C. As directed by the Health Officer, reasonable records of the maintenance of oven doors, oven burners, and oven interiors are to be made and retained for a reasonable time.	6.9.7
17	Coke Oven Standards For the emission unit permitted herein, the permittee shall comply with the coke oven requirements of Sections 6.9.2, Paragraph 6.9.5(a), Section 6.9.6, and Section 6.9.7 of the Rules and Regulations.	6.9
	Section 3 -- Compliance and Performance Test Methods and Procedures	
18	Subpart L – Performance Tests and Procedures Except as otherwise provided, a daily performance test shall be conducted each day, 7 days per week for each new and existing coke oven battery, the results of which shall be used in accordance with procedures specified in this subpart to determine compliance with each of the applicable visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations in this subpart.	40 CFR 63, 63.309
19	Test Methods and Procedures The permittee shall determine compliance with the visible emissions restrictions of this permit by the following EPA's reference methods under 40 CFR 60, Appendix A, July 1, 2008, as the same may be amended or revised: Method 9: Visual Determination of the Opacity of Emissions from Stationary Sources Method 22: Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares Method 303: Determination of Visible Emissions from By-Product Coke Oven Batteries	2.1.3 40 CFR 60
	Section 4 – Continuous Emission Monitoring – Not Applicable	
	Section 5 -- Recordkeeping and Reporting Requirements	
20	Subpart L – Semiannual Compliance Certification The owner or operator of a coke oven battery shall comply with reporting requirement as contained in 63.311 of 40 CFR 63.	40 CFR 63
21	Subpart L – Recordkeeping The owner or operator shall maintain files of all required information in a permanent form suitable for inspection at an onsite location for at least 1 year and must thereafter be accessible within 3 working days to the Administrator. Copies of the work practice plan developed under 63.306 of 40 CFR 63, and the startup, shutdown, and malfunction plan developed under 63.310 of 40 CFR 63, shall be kept onsite at all times.	40 CFR 63, 63.311
22	Department Required Annual Report Requirement The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation; B. The quantity of coke oven gas burned in million cubic feet; C. The average monthly total sulfur content and heat content of coke oven gas; and D. The actual emissions (point and fugitive) of all regulated air pollutants.	1.5.15 2.1.3 18.5.3

Emissions Unit Operating Permit Summary

Emissions Unit No.: 003

Company: ABC Coke

Source Description: Coke Oven Battery No. 5
Charging, Coking, Soaking, Oven Doors, Lids, Offtake Systems, Collecting Mains, Bleeder Flares, and Emergency Bleeder Flares

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used: COG

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standards
Visible Emissions (VE)	20% Opacity	Part 6.1
Visible Emissions (VE)	20% Opacity – Charging	Section 6.9.3
Coke Battery Emissions	4.0% leaking coke oven doors for each short by-product coke oven battery 0.4 % leaking topside port lids 2.5 % leaking offtake systems 12 seconds of visible emissions per charge	40 CFR 63
Particulate Emissions	15% leaking coke oven doors 5 % leaking topside port lids 10 % leaking offtake systems	Part 6.9
Visible Emissions (VE) Hazardous Air Pollutants (HAP)	No visible emissions from emergency bypass/bleeder stack flares, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours	40 CFR 63
Hazardous Air Pollutants (HAP)	Installation and operation of a emergency bypass/bleeder stack flare venting to atmosphere with a minimum of 98% destruction control	40 CFR 63
Volatile Organic Compounds (VOC)	95 % removal of VOC from coke oven gas bleeder (venting surplus COG) control system prior to discharge to the atmosphere	Part 8.27
Hazardous Air Pollutants (HAP)	Charging, soaking, oven doors, lids, offtake systems, collecting mains, emergency bleeder flares	40 CFR 63 LAER Extention Track, Subpart CCCCC

Pollution Control Device: Flares

Continuous Emission Monitors: None

EPA Reference Test Methods: Method 9, Method 22, Method 303, Appendix A (40 CFR 60)

Reporting Requirements: See Section 5, herein

Applicable Regulations: Section 1.5.15, Section 2.1.3, Part 6.1, Section 6.9.3, Section 6.9.5, Section 6.9.6, Part 6.9, Part 8.27, Section 18.5.3, Part 18.5, 40 CFR 60, 40 CFR 63

No.	Permit Conditions for Emissions Unit No. 003	Regulation
	Section 1 – Applicability	
1	Applicability Visible Emissions Restriction The Emissions Unit No. 003 permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60 minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, July 1, 2008, as the same may be amended or revised.	6.1 18.5 40 CFR 60
2	Emissions Unit 003 permitted herein is subject to and shall comply with the requirements under Subpart L (National Emission Standards for Coke Oven Batteries) of Title 40 of Part 63 of the Code of Federal Regulations (40 CFR 63)	40 CFR 63, 63.300
	Section 2 – Emission, Equipment, Production Requirements, Limitations and Work Practice Standards	
3	Control of Particulate Matter Emissions Unit 003 permitted herein is subject to and shall comply with the requirements under Part 6.9, "Control of Particulate Emissions – Coke Ovens," of the Rules and Regulations.	6.9
4	Coke Oven Gas Bleeder (Venting Surplus COG) Each coke oven gas bleeder shall be equipped with a closed vent system capable of capturing and transporting excess gas to a control device. All coke oven gas from the closed vent system shall be passed through the said control device which removes at least 95% percent of the VOC from such gas before it is discharged to the atmosphere. Owner or operators of control devices used to comply with this requirement shall monitor/test such control devices to ensure that they are operated and maintained in conformance with their design specifications. Closed vent systems shall be monitored to determine compliance with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, and, by visual inspections, quarterly, and at other times requested by the Health Officer.	8.27
5	Percent Leaking Door Restriction The number of doors leaking as determined pursuant to Method 303 (standards for compliance date extension) shall not exceed 4.0% on a 30-day rolling average basis. In addition, at any given time, the number of doors leaking shall not exceed 15 % of the total doors ovens in operation.	6.9.6 40 CFR 60 40 CFR 63
6	Percent Leaking Lids Restriction The number of topside lids leaking as determined pursuant to Method 303 (standards for compliance date extension) shall not exceed 0.4% on a 30-day rolling average basis. In addition, at any given time, the number of topside lids leaking shall not exceed 5% of the total lids on ovens in operation.	6.9.5 40 CFR 60 40 CFR 63
7	Percent Leaking Offtake System Restriction The number of offtake system leaking as determined pursuant to Method 303 (standards for compliance date extension) shall not exceed 2.5% on a 30-day rolling average basis. In addition, at any given time, the number of offtake systems leaking shall not exceed 10 % of the total offtake systems on ovens in operation.	6.9.5 40 CFR 60 40 CFR 63
8	Charging Visible Emissions Time Restriction There shall be no more than 12 seconds of visible emissions per charge as determined pursuant to Method 303 on a 30-day rolling average basis.	40 CFR 63

9	Charging Visible Emissions Opacity Restriction At any time, there shall be no visible emissions during the charging cycle from charging holes or the larry car of any battery with an opacity which is greater than 20% except for an average period or periods not to exceed 3 minutes of any consecutive 60 minutes on batteries with less than 70 ovens nor more than 4 minutes of any consecutive 60 minutes on batteries with seventy 70 ovens or more. Visible emissions observations shall be conducted pursuant to Method 22 of 40 CFR 60. The procedures of Subpart L, including data collected by Method 303 are consistent with the State Implementation Plan (SIP) for visible emissions opacity observations and can be used to enforce the SIP. Therefore, the inspection conducted using Method 303 will be used by this Department for compliance assurance with Section 6.9.3 of the Rules and Regulations.	6.9.3
10	Emergency Bypass/Bleeder Flares Emissions Limitation There shall be no emissions from any emergency bypass/bleeder flares, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Compliance with this requirement shall be determined by using Method 22 in Appendix A of 40 CFR 60 with an observation period of 2 hours.	40 CFR 60 40 CFR 63
11	Subpart L – Standards for Collecting Mains A. The owner or operator of a by-product coke oven battery shall inspect the collecting main for leaks at least once daily according to the procedures in Method 303. B. The owner or operator shall document any leak observed, and implement a collecting main repair within the time period allowed by the subpart.	40 CFR 63, 63.308
12	Subpart L - Work Practice Standards The work plan required to be submitted in accordance with 63.300 of Subpart L of 40 CFR 63 shall be implemented and adhered to on a continuous basis. The plan shall be designed to achieve compliance with visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations.	40 CFR 63, 63.306, 63.307, and 63.309(h)(2)
13	Subpart L – Implementation of Work Practice Plans The owner or operator of a coke oven battery subject to visible emissions limitations shall implement the provisions of the work practice plan pertaining to a particular emission point following the second independent exceedance of the visible emissions limitation for the emission point in any consecutive 6-month period.	40 CFR 63, 63.306
14	Subpart L - Start-Up, Shutdown, and Malfunctions (SSM) Each owner or operator of a coke oven battery shall develop, according to 63.310(c) of 40 CFR 63, a written startup, shutdown, and malfunction plan that describes procedures for operating the battery, including associated air pollution control equipment, during a period of a startup, shutdown, or malfunction in a manner consistent with good air pollution control practices for minimizing emissions, and procedures for correcting malfunctions process and air pollution control equipment. If the owner or operator demonstrates, to the satisfaction of the Administrator, that a startup, shutdown or malfunction has occurred, then an observation occurring during such startup, shutdown or malfunction shall not: A. Constitute a violation of relevant requirements of this subpart; and B. Be used for in any compliance determination under 63.309.	40 CFR 63, Paragraph 63.310(i)
15	Subpart L – Notification of Start-Up, Shutdown, and Malfunction (SSM) In order for provisions of 63.310(i) of 40 CFR 63 to apply with respect to an observation for a particular day, notification of a startup, shutdown, or a malfunction shall be made by the owner or operator: A. If practical to the certified observer, if present during the occurrence; or to the enforcement agency, in writing within 24 hours of the occurrence B. Within 14 days from the notification as contained within condition 2 of this emissions unit, describing in detail the startup, shutdown or malfunction	40 CFR 63, 63.310

16	Oven Maintenance A. All ovens shall be maintained in good condition to promote complete coking of coal. B. All coke oven cracks are to be sealed as soon as practicable after they are detected. C. As directed by the Health Officer, reasonable records of the maintenance of oven doors, oven burners, and oven interiors are to be made and retained for a reasonable time.	6.9.7
17	Coke Oven Standards For the emission unit permitted herein, the permittee shall comply with the coke oven requirements of Sections 6.9.2, Paragraph 6.9.5(a), Section 6.9.6, and Section 6.9.7 of the Rules and Regulations.	6.9
	Section 3 -- Compliance and Performance Test Methods and Procedures	
18	Subpart L – Performance Tests and Procedures Except as otherwise provided, a daily performance test shall be conducted each day, 7 days per week for each new and existing coke oven battery, the results of which shall be used in accordance with procedures specified in this subpart to determine compliance with each of the applicable visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations in this subpart.	40 CFR 63, 63.309
19	Test Methods and Procedures The permittee shall determine compliance with the visible emissions restrictions of this permit by the following EPA's reference methods under 40 CFR 60, Appendix A, July 1, 2008, as the same may be amended or revised: Method 9: Visual Determination of the Opacity of Emissions from Stationary Sources Method 22: Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares Method 303: Determination of Visible Emissions from By-Product Coke Oven Batteries	2.1.3 40 CFR 60
	Section 4 – Continuous Emission Monitoring – Not Applicable	
	Section 5 -- Recordkeeping and Reporting Requirements	
20	Subpart L – Semiannual Compliance Certification The owner or operator of a coke oven battery shall comply with reporting requirements as contained in 63.311 of the subpart.	40 CFR 63
21	Subpart L – Recordkeeping The owner or operator shall maintain files of all required information in a permanent form suitable for inspection at an onsite location for at least 1 year and must thereafter be accessible within 3 working days to the Administrator. Copies of the work practice plan developed under 63.306 of 40 CFR 63 and the startup, shutdown, and malfunction plan developed under 63.310 of 40 CFR 63 shall be kept onsite at all times.	40 CFR 63, 63.311
22	Department Required Annual Report Requirement The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation; B. The quantity of coke oven gas burned in million cubic feet; C. The average monthly total sulfur content and heat content of coke oven gas; and D. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations.	1.5.15 2.1.3 18.5.3

Emissions Unit Operating Permit Summary

Emissions Unit No.: 004

Company: ABC Coke

Source Description: Coke Oven Battery No. 1
Charging, Coking, Soaking, Oven Doors, Lids, Offtake Systems, Collecting Mains, Bleeder Flares, and Emergency Bleeder Flares

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used: COG

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standards
Visible Emissions (VE)	20% Opacity	Part 6.1
Visible Emissions (VE)	20% Opacity – Charging	Section 6.9.3
Coke Battery Emissions Hazardous Air Pollutants (HAP)	Tall Battery –Subpart CCCCC (greater than 5 meters in height) Short Battery-Subpart L (less than 6 meters in height) 4.0% leaking coke oven doors for each short by-product coke oven battery 0.4 % leaking topside port lids 2.5 % leaking offtake systems 12 seconds of visible emissions per charge	40 CFR 63
Particulate Emissions	15% leaking coke oven doors 5 % leaking topside port lids 10 % leaking offtake systems	Part 6.9
Visible Emissions (VE) Hazardous Air Pollutants (HAP)	No visible emissions from emergency bypass/bleeder stack flares, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours	40 CFR 63
Hazardous Air Pollutants (HAP)	Installation and operation of a emergency bypass/bleeder stack flares venting to atmosphere with a minimum of 98% destruction control	40 CFR 63
Volatile Organic Compounds (VOC)	95 % removal of VOC from coke oven gas bleeder (venting surplus COG) control system prior to discharge to the atmosphere	Part 8.27
Hazardous Air Pollutants (HAP)	Charging, soaking, oven doors, lids, offtake systems, collecting mains, emergency bleeder flares	40 CFR 63 LAER Extension Track, Subpart CCCCC

Pollution Control Device: Flares

Continuous Emission Monitors: None

EPA Reference Test Methods: Method 9, Method 22, Method 303, Appendix A (40 CFR 60)

Reporting Requirements: See Section 5, herein

Applicable Regulations: Section 1.5.15, Section 2.1.3, Part 6.1, Section 6.9.3, Section 6.9.5, Section 6.9.6, Part 6.9, Part 8.27, Section 18.5.3, Part 18.5, 40 CFR 60, 40 CFR 63

No.	Permit Conditions for Emissions Unit No. 004	Regulation
	Section 1 – Applicability	
1	Applicability Visible Emissions Restriction The Emissions Unit No. 004 permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60 minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, July 1, 2008, as the same may be amended or revised.	6.1 18.5 40 CFR 60
2	Subpart L The Emissions Unit No. 004 herein is subject to the requirements as listed in Subpart L (National Emissions Standards for Hazardous Air Pollutants for Coke Ovens) of Part 63 of Title 40 of the Code of Federal Regulations.	40 CFR 63, 63.300
	Section 2 – Emission, Equipment, Production Requirements, Limitations and Work Practice Standards	
3	Control of Particulate Matter Emissions Unit 004 permitted herein is subject to and shall comply with the requirements under Part 6.9, "Control of Particulate Emissions – Coke Ovens," of the Rules and Regulations.	6.9
4	Coke Oven Gas Bleeder (Venting Surplus COG) Each coke oven gas bleeder shall be equipped with a closed vent system capable of capturing and transporting excess gas to a control device. All coke oven gas from the closed vent system shall be passed through the said control device which removes at least 95% percent of the VOC from such gas before it is discharged to the atmosphere. Owner or operators of control devices used to comply with this requirement shall monitor/test such control devices to ensure that they are operated and maintained in conformance with their design specifications. Closed vent systems shall be monitored to determine compliance with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, and, by visual inspections, quarterly, and at other times requested by the Health Officer.	8.27
5	Percent Leaking Door Restriction The number of doors leaking as determined pursuant to Method 303 (standards for compliance date extension) shall not exceed 4.0% on a 30-day rolling average basis. In addition, at any given time, the number of doors leaking shall not exceed 15 % of the total doors ovens in operation.	6.9.6 40 CFR 60 40 CFR 63
6	Percent Leaking Lids Restriction The number of topside lids leaking as determined pursuant to Method 303 (standards for compliance date extension) shall not exceed 0.4% on a 30-day rolling average basis. In addition, at any given time, the number of topside lids leaking shall not exceed 5% of the total lids on ovens in operation.	6.9.5 40 CFR 60 40 CFR 63
7	Percent Leaking Offtake System Restriction The number of offtake system leaking as determined pursuant to Method 303 (standards for compliance date extension) shall not exceed 2.5% on a 30-day rolling average basis. In addition, at any given time, the number of offtake systems leaking shall not exceed 10 % of the total offtake systems on ovens in operation.	6.9.5 40 CFR 60 40 CFR 63

8	Charging Visible Emissions Time Restriction There shall be no more than 12 seconds of visible emissions per charge as determined pursuant to Method 303 on a 30-day rolling average basis.	40 CFR 63
9	Charging Visible Emissions Opacity Restriction At any time, there shall be no visible emissions during the charging cycle from charging holes or the larry car of any battery with an opacity which is greater than 20% except for an average period or periods not to exceed 3 minutes of any consecutive 60 minutes on batteries with less than 70 ovens nor more than 4 minutes of any consecutive 60 minutes on batteries with 70 ovens or more. Visible emissions observations shall be conducted pursuant to Method 22 of 40 CFR 60. The procedures of Subpart L, including data collected by Method 303, are consistent with the State Implementation Plan (SIP) for visible emissions opacity observations and can be used to enforce the SIP. Therefore, the inspection conducted using Method 303 will be used by this Department for compliance assurance with Section 6.9.3 of the Rules and Regulations.	6.9.3
10	Emergency Bypass/Bleeder Flares Emissions Limitation There shall be no emissions from any emergency bypass/bleeder flares, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Compliance with this requirement shall be determined by using Method 22 in Appendix A of 40 CFR 60 with an observation period of 2 hours.	40 CFR 60 40 CFR 63
11	Subpart L – Standards for Collecting Mains A. The owner or operator of a by-product coke oven battery shall inspect the collecting main for leaks at least once daily according to the procedures in Method 303. B. The owner or operator shall document any leak observed, and implement a collecting main repair within the time period allowed by the subpart.	40 CFR 63, 63.308
12	Subpart L - Work Practice Standards The work plan required to be submitted in accordance with 63.300 of Subpart L of 40 CFR 63 shall be implemented and adhered to on a continuous basis. The plan shall be designed to achieve compliance with visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations.	40 CFR 63, 63.307, and 63.309(h)(2)
13	Subpart L – Implementation of Work Practice Plans The owner or operator of a coke oven battery subject to visible emissions limitations shall implement the provisions of the work practice plan pertaining to a particular emission point following the second independent exceedance of the visible emissions limitation for the emission point in any consecutive 6-month period.	40 CFR 63, Section 63.306
14	Subpart L - Start-Up, Shutdown, and Malfunctions (SSM) Each owner or operator of a coke oven battery shall develop, according to 63.310(c) of 40 CFR 63, a written startup, shutdown, and malfunction plan that describes procedures for operating the battery, including associated air pollution control equipment, during a period of a startup, shutdown, or malfunction in a manner consistent with good air pollution control practices for minimizing emissions, and procedures for correcting malfunctions process and air pollution control equipment. If the owner or operator demonstrates, to the satisfaction of the Administrator, that a startup, shutdown or malfunction has occurred, then an observation occurring during such startup, shutdown or malfunction shall not: A. Constitute a violation of relevant requirements of this subpart; and B. Be used for in any compliance determination under 63.309 of 40 CFR 63.	40 CFR 63, 63.310(i)

15	Subpart L – Notification of Start-Up, Shutdown, and Malfunction (SSM) In order for provisions of 63.310(i) of 40 CFR 63, to apply with respect to an observation for a particular day, notification of a startup, shutdown, or a malfunction shall be made by the owner or operator: A. If practical to the certified observer, if present during the occurrence; or to the enforcement agency, in writing within 24 hours of the occurrence B. Within 14 days from the notification as contained within condition 2 of this emissions unit, describing in detail the startup, shutdown or malfunction	40 CFR 63, 63.310
16	Oven Maintenance A. All ovens shall be maintained in good condition to promote complete coking of coal. B. All coke oven cracks are to be sealed as soon as practicable after they are detected. C. As directed by the Health Officer, reasonable records of the maintenance of oven doors, oven burners, and oven interiors are to be made and retained for a reasonable time.	6.9.7
17	Coke Oven Standards For the emission unit permitted herein, the permittee shall comply with the coke oven requirements of Sections 6.9.2, Paragraph 6.9.5(a), Section 6.9.6, and Section 6.9.7 of the Rules and Regulations.	6.9
	Section 3 -- Compliance and Performance Test Methods and Procedures	
18	Subpart L – Performance Tests and Procedures Except as otherwise provided, a daily performance test shall be conducted each day, 7 days per week for each new and existing coke oven battery, the results of which shall be used in accordance with procedures specified in this subpart to determine compliance with each of the applicable visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations in this subpart.	40 CFR 63, 63.309
19	Test Methods and Procedures The permittee shall determine compliance with the visible emissions restrictions of this permit by the following EPA's reference methods under 40 CFR 60, Appendix A, July 1, 2008, as the same may be amended or revised: Method 9: Visual Determination of the Opacity of Emissions from Stationary Sources Method 22: Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares Method 303: Determination of Visible Emissions from By-Product Coke Oven Batteries	2.1.3 40 CFR 60
	Section 4 – Continuous Emission Monitoring – Not Applicable	
	Section 5 -- Recordkeeping and Reporting Requirements	
20	Subpart L – Semiannual Compliance Certification The owner or operator of a coke oven battery shall comply with the reporting requirements as contained in 63.311 of 40 CFR 63.	40 CFR 63
21	Subpart L – Recordkeeping The owner or operator shall maintain files of all required information in a permanent form suitable for inspection at an onsite location for at least 1 year and must thereafter be accessible within 3 working days to the Administrator. Copies of the work practice plan developed under 63.306 of 40 CFR 63, and the startup, shutdown, and malfunction plan developed under 63.310 of 40 CFR 63, shall be kept onsite at all times.	40 CFR 63, 63.311

22	Department Required Annual Report Requirement The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation; B. The quantity of coke oven gas burned in million cubic feet; C. The average monthly total sulfur content and heat content of coke oven gas; and D. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations.	1.5.15 2.1.3 18.5.3

Emissions Unit Operating Permit Summary

Emissions Unit Number: 005

Emissions Unit Description: Coke By-Products

Operating Permit Number: 4-07-0001-02

Facility Name: ABC Coke – Coke/Utilities

Permitted Operating Schedule: 8,760 hours per year

Type and Quantity of Fuel Used: N/A

Pollutants Emitted:

Pollutants	Regulatory Emission Limits	Applicable Standards
Visible Emissions (VE)	20 % Opacity	Part 6.1
Fugitive Emissions	Restrict Beyond Property Lines	Part 6.2
Volatile Organic Compounds (VOC)-Benzene (HAP)	No detectable emissions from final-cooler cooling towers, and final coolers	40 CFR 61, Subpart L
Benzene (HAP)	Less than 10 Mg/Yr	40 CFR 61, Subpart FF
Benzene (VHAP)	Leak Detection & Repair	40 CFR 61, Subpart V

Pollution Control Equipment: Enclosed Positive Pressure Gas Blanketing System

Continuous Monitor: None

Periodic Monitoring: Sections 61.242, 61.244, 61.135, Part 8.26
Sections 61.242-3 and 61.242-9 are excluded

Continuous Compliance Determiner: None

EPA Reference Test Methods: Methods 2, 2A, 2C, 2D 21, 22, 40 CFR 60, Appendix A

Reporting Requirements: See Section 5

Applicable Regulations: Part 1.3, Section 1.5.15, Section 2.1.3, Chapter 4, Part 6.1, Section 8.26.3, Section 8.26.4, Section 8.26.5, Section 8.26.6, Section 8.26.7, Section 8.26.8, Section 8.26.9, Section 8.26.10, Section 8.26.11, Section 8.26.12, Section 8.27.2, Section 8.27.3, Section 8.27.4, Section 8.27.5, Chapter 16, Chapter 18, Section 18.2.4, Section 18.2.8, 40 CFR 60, 40 CFR 61

No.	Permit Conditions for Emissions Unit No. 005	Regulations
	Section 1 – Applicability	
1	The Emissions Unit No. 005, Coke By-Products Recovery Plant, is subject to the visible emissions restrictions of Part 6.1, the fugitive emissions restrictions of Part 6.2, the equipment leak detection and repair requirements of Part 8.26, the permitting requirements of Chapter 18 of the Rules and Regulations, and the control and equipment leak detection and repair requirements of Subpart L and V of 40 CFR 61.	6.1 6.2 8.26 Chapter 18 40 CFR 61
2	Subpart FF The Emissions Unit 005 permitted herein is subject to the requirements as listed in Subpart FF (National Emission Standard for Benzene Waste Operations) of Part 61 of Title 40 of the Code of Federal Regulations.	2.1.3 Chapter 18 40 CFR 61
	Section 2 – Emissions, Equipment or Production Requirements and Limitations	
3	Visible Emissions Restriction The Emissions Unit No. 005 permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6 minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, July 1, 2008, as the same may be amended or revised.	6.1 18.5 40 CFR 60
4	Fugitive Emissions Restriction The Emissions Unit No. 005 permitted herein is subject to and shall comply with the requirements under Part 6.2 of the Rules and Regulations. The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following: A. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land; B. Application of asphalt, oil, water, or suitable chemicals on dirt roads, material stock piles, and other surfaces which create airborne dust problems; C. Installation and use of hoods, fans, and fabric filters (or other suitable control devices) to enclose and vent the handling of dust materials. Adequate containment methods shall be employed during sandblasting or other similar operations. The permittee shall not cause or permit the discharge of visible emissions beyond the lot line of the property on which the emissions originate. When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any rule or regulation, the Health Officer may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.	6.2 18.5

5	Standards for Process Vessels, Storage Tanks, Tar-Intercepting Sumps, Process Vessels, Tar Storage Tanks, Light Oil Sumps, Napthalene Processing, Final Coolers, Final-Cooler Cooling Towers, and Equipment Leaks The equipment types indicated associated with Emissions Unit No. 005 permitted herein are subject to the applicable standards as listed in Sections 61.132 through 61.135 of Subpart L of 40 CFR 61 and Sections 61.242-1 through 61.243-2 of Subpart V of 40 CFR 61.	40 CFR 61
6	Benzene Waste Restriction Pursuant to the requirements of Subpart FF, the total annual benzene quantity from facility waste shall be less than 10 Megagrams per year (Mg/yr).	
7	Limitation for Napthalene Processing, Final Coolers, and Final-Cooler Cooling Tower No ("zero") emissions shall be allowed from final coolers and final cooler-cooling towers. Zero emissions shall be determined by monitoring all connections, seals, lines at associated with the indicated equipment utilizing Method 21 (40 CFR 60, Appendix 40) and procedures specified in 61.245(c) of 40 CFR 61, and the indicated equipment (including sealing materials) shall be visually inspected for evidence of visible defects such as gaps or tears. This monitoring shall be conducted on a monthly basis.	40 CFR 60 40 CFR 61
8	Standards for All Equipment in VOC Service at Coke By-Product Recovery Plants The equipment types indicated associated with Emissions Unit No. 005 permitted herein are subject to the standards as listed in Sections 8.26.3, 8.26.4, 8.26.5, 8.26.6, 8.26.7, 8.26.8, 8.26.9,8.27.2, 8.27.3, 8.27.4, and 8.27.5 of the Rules and Regulations.	8.26 8.27
	Section 3 – Compliance and Performance Test Methods and Procedures	
9	Leak Detection and Repair Program (LDAR) Program Monitoring Requirements A LDAR program shall be implemented to include the equipment types associated with Emissions Unit No. 005 permitted per the applicable standards as listed in 61.132 through 61.135 of Subpart L of 40 CFR 61; 61.242-1 through 61.243-10 (excluding 61.242-3 & 61.242-9) of Subpart V of 40 CFR 61; and Sections 8.26.3, 8.26.4, 8.26.5, 8.26.6, 8.26.7, 8.26.8, 8.26.9,8.27.2, 8.27.3, 8.27.4, and 8.27.5 of the Rules and Regulations.	40 CFR 61 8.26 8.27
10	The Department may request that the permittee demonstrate compliance with the emission rate restrictions of this Major Source Operating Permit and the Regulations by using the following EPA-approved methods and procedures: A. Reference Method 2, 40 CFR 60, Appendix A Determination of Stack Gas Velocity and Volumetric Flow Rate B. Reference Method 2A, 40 CFR 60, Appendix A Direct measurement of Gas Volume through Pipes and Small Ducts C. Reference Method 2B, 40 CFR 60, Appendix A Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks D. Reference Method 2C: 40 CFR 60, Appendix A Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube) E. Reference Method 2D: 40 CFR 60, Appendix A Measurement of Gas Volume Flow Rates in Small Pipes and Ducts F. Reference Method 21: 40 CFR 60, Appendix A Determination of Volatile Organic Compound Leaks G. Reference Method 22: 40 CFR 60, Appendix A Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares	18.2.5 18.7 40 CFR 60

11	Subpart FF Monitoring The permittee shall determine the total annual benzene quantity from facility waste as specified by in 61.355 of 40 CFR 61. The permittee shall repeat the determination of the total annual benzene quantity at least once per year and whenever there is a change in the process that could cause the total annual benzene quantity from waste to 10 Mg/yr or more. If the total annual benzene quantity is less than 1 Mg/yr, then the owner or operator shall comply with the recording and recordkeeping requirements of 61.356 and 61.357 of 40 CFR 61.	40 CFR 61 61.355, 61.356, and 61.357
	Section 4 – Continuous Emission Monitoring - No applicable requirements.	
	Section 5 – Recordkeeping and Reporting Requirements	
12	For the unit permitted herein, where applicable, records shall be kept and reports shall be submitted in accordance with 61.138 of Subpart L of 40 CFR 61, 61.246 and 61.247 of Subpart V of 40 CFR 61, 61.356 and 61.357 of Subpart FF, and Sections 8.26.10 and 8.26.11 of the Rules and Regulations.	8.26 40 CFR 61
13	Annual Report Requirement The permittee shall submit to the Department by February 10th of each calendar year an annual summary report for the previous calendar year in a format approved by the Department the following production and emissions information: A. For each emissions unit type associated with the by-products recovery facility (light-oil storage tank, tar decanter, direct-water cooling tower, tar intercepting sump, tar dewatering sump, tar storage tank, light oil condenser vent, light oil sump, BTX storage, flushing liquor circulation tank, excess ammonia liquor tank, wash-oil circulation tank), list the number of emissions unit types; B. The actual emissions of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations, including all individual HAP emissions, and including fugitive emissions shall be included in the report; C. For storage tanks, the chemical or trade name of the stored VOC in the tank; D. The average storage temperature of the stored VOC in degrees Fahreinheit; E. The average true vapor pressure (in psia) of the stored VOC at storage temperature; F. The quantity in gallons of any VOC/HAP materials lost (evaporated to the atmosphere) due to a spillage, leak, or any other mishap; G. The annual throughput in gallons per year; and H. In regards to Subpart FF, at the point of waste generation, the annual waste quantity, range of benzene concentrations (monthly values), the annual average flow-weighted benzene concentrations, and the annual benzene quantity.	2.1.3 18.5 18.7
14	NESHAP Notification, Reporting, and Recordkeeping Requirements Where applicable, the permittee shall comply with the notification, reporting, and recordkeeping requirements of Subparts A , L, V, and FF of 40 CFR 61.	40 CFR 61

Emissions Unit Operating Permit Summary

Emissions Unit No.: 007

Company: ABC Coke

Source Description: Underfire Stack Coke Oven Batteries Nos. 5 and 6

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20% Opacity/3-Minute Average per 60-Minute Period	Section 6.9.8
Visible Emissions (VE)	20% Opacity during batterywide extended coking cycle; 15% Opacity during normal coking cycle (short battery less than 5 meters in height)	40 CFR 63 (Subpart CCCCC)
Particulate Matter (PM)	0.12 lbs/MMBTU of Heat Input (Max. Capacity)	Part 6.3
Particulate Matter (PM_{10})	N/A	N/A
Sulfur Dioxide (SO_2)	1.8 lbs/MMBTU of Heat Input	Section 7.1.1
Nitrogen Oxides (NOx)	N/A	N/A
Carbon Monoxide (CO)	N/A	N/A
Volatile Organic Compounds (VOC)	N/A	N/A

Pollution Control Device: None

Continuous Emission Monitors: COMS

Continuous Compliance Determiner:
Daily Recordkeeping of Fuels Coke Oven Gas Combusted
Maximum Heat Input Restricted to 250 MMBTU/hour
Monthly Testing of COG Sulfur Content
Restricted to Coke Oven Gas Combustion
Operation of COMs-24 hour (daily average) of data
Work Practice Standards
Operation and Maintenance Requirements
Start-up, Shutdown, and Maintenance Plan

Title V Monitoring:
Twice Weekly Visible Emissions Observation of Combustion Stack;
Installation of COMS
Monthly Sampling & Testing of COG Sulfur Content
Monthly Sampling & Testing of COG Heat Content

EPA Reference Test Methods: 1, 2, 3, 4, 5, 6, 7 and 9 of 40 CFR 60, Appendix A

Reporting Requirements: See Section 6

Applicable Regulations: Section 1.5.15, Section 2.1.3, Part 6.1, Part 6.3, Section 6.9.8, Part 7.1, Section 7.1.1, Part 18.5, Section 18.5.3, 40 CFR 60, 40 CFR 63

No.	Permit Conditions for Emissions Unit No. 007	Regulation
	Section 1 – Applicability	
1	Applicability The Emissions Unit 007, Underfire Stack of Batteries Nos. 5 & 6, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including ducts, fuel-feeding equipment, combustion controls, stacks and chimneys, and the combustion fuels used. The emissions unit is subject to the particulate emission rate allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Regulations. The emissions unit is subject to the visible emissions restrictions under Section 6.9.8, entitled "Combustion Stacks," of the Regulations. The emissions unit is subject to Part 7.1, entitled "Fuel Combustion," of the Regulations. The emissions unit is subject to the major source emissions fees of Chapter 16 of the Regulations. The emissions unit is subject to Title V permitting requirements of Chapter 18 of the Regulations.	6.3 6.9.8 7.1 Chapter 16 Chapter 18
2	General Compliance Requirements The permittee shall be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in Section 63.2.	40 CFR 63 Chapter 18
3	Startup, Shutdown, and Malfunction Plan The permittee shall develop and implement a written startup, shutdown, and malfunction plan according to the provisions of 63.6(e)(3) of 40 CFR 63. For COMS, a monitoring malfunction is any sudden, infrequent, not reasonably preventive failure of the monitor to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.	40 CFR 63 63.7332 Chapter 18
4	Subpart CCCCC The Emissions Unit No. 007 herein is subject to the requirements as listed in Subpart CCCCC (National Emissions Standards for Hazardous Air Pollutants for Coke Ovens) of Part 63 of Title 40 of the Code of Federal Regulations.	40 CFR 63 Chapter 18
	Section 2 -- Emission, Equipment or Production Requirements and Limitations	
5	Visible Emissions Restriction The Emissions Unit No. 007 shall comply with the visible emissions requirements under Section 6.9.8 of the Rules and Regulations. There shall be no visible emissions, other than water mist or vapor, with an opacity greater than 20% from the combustion stack except for a period or periods aggregating not more than 3 minutes in any consecutive 60 minutes. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60. The permittee shall perform a visual observation of the emission unit's combustion stack and make a record of the visual observation at least twice per week for a period of 15 minutes or more. If any visible emissions (greater than 15% opacity) are observed, the permittee shall expeditiously correct the problem causing the emission unit to emit visible emissions and make a record of the event and the corrective actions. If the visible emissions cannot be corrected, the permittee shall have a certified Reference Method 9 observer determine the combustion stack's opacity within 24 hours.	2.1.3 6.9.8 18.5.3(a)(2)
6	Subpart CCCCC - Emissions Limitation The permittee shall not discharge to the atmosphere any emissions from any battery stack at a existing by-product coke oven battery that exhibit an opacity greater than the applicable limits shown below: A. Daily average of 15% opacity for a battery on a normal coking cycle; or B. Daily average of 20% opacity for a battery on a battery-wide extended coking	40 CFR 63, 63.7296 Chapter 18

7	Particulate Emissions Restriction The Emissions Unit permitted herein is subject to and shall comply with the particulate emission rate restriction that is allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Regulations. The permittee shall not cause or allow the emissions of particulate matter from the fuel-burning equipment permitted herein in excess of 0.12 pounds per million BTU of heat input (at 250 MMBTU/hr) as determined by EPA Reference Method 5 of Appendix A of 40 CFR 60, July 1, 2008, as the same may be amended or revised. To comply with Title V monitoring requirements, the permittee shall demonstrate compliance with this emission limit by certifying to the Department in writing that only clean coke oven gas is combusted in the emissions unit. This written certification shall be submitted biennially.	2.1.3 6.3 18.5 18.5.3(a)(2)
8	Sulfur Oxides Emissions Restriction The Emissions Unit permitted herein is subject to and shall comply with the sulfur oxide emission rate restriction that is allowed under Section 7.1.1 of the Rules and Regulations. The permittee shall not cause or allow the emissions of sulfur oxides, measured as sulfur dioxide, from the fuel-burning equipment permitted herein in excess of 1.8 pounds per million BTU of heat input as determined by EPA Reference Method 6C of Appendix A of 40 CFR 60, July 1, 2008, as the same may be amended or revised. To comply with Title V monitoring requirements, the permittee shall collect monthly samples of coke oven gas and analyze them for sulfur content (hydrogen sulfide) by weight. The permittee shall also determine the heat content of each fuel sample. The emissions unit is restricted to combusting coke oven gas.	2.1.3 7.1.1 18.5 18.5.3(a)(2)
9	Combustion Fuel Restriction The Emissions Unit permitted herein is restricted to combusting coke oven gas. This restriction shall be demonstrated by recording and maintaining a record of the amount (within ± 1% accuracy) of COG combusted each calendar day.	2.1.3 18.5
10	Heat Input Restriction The Emissions Unit permitted herein shall not exceed 250,000,000 BTUs per hour of heat input. This restriction shall be demonstrated by recording and maintaining a record of the amounts (within ± 1% accuracy/ ± 123 x 10^3 CF/day on a 18-hour coking cycle/92 x 10^3 CF/day on a 24-hour coking cycle) of fuel combusted and time operated each calendar day.	2.1.3 18.5
	Section 3 -- Compliance and Performance Test Methods and Procedures	
11	Test Methods and Procedures The permittee shall determine compliance with the particulate emissions, sulfur oxide emissions, and visible emissions restrictions of this permit by the following EPA's reference methods under 40 CFR 60, Appendix A, July 1, 2008, as the same may be amended or revised: Method 1: Sample and Velocity Traverses Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate Method 3: Gas Analysis for Carbon Monoxide, Oxygen, Excess Air, and Dry M. W. Method 4: Determination of Moisture Content in Stack Gases Method 5: Determination of Particulate Emissions Method 6C: Determination of Sulfur Dioxide Emissions Method 7: Determination of Nitrogen Oxide Emissions Method 9: Visual Determination of the Opacity of Emissions Tutwiler Method: Sulfur Content (H_2S) in Gas Mixtures Calorimeter: Determination of Heat Content of Fuels in BTU per Cubic Foot	2.1.3 40 CFR 60

12	Subpart CCCCC—Performance Testing The permittee shall conduct an initial and subsequent (continuous) performance test in accordance with the following: To determine compliance with the daily average opacity limit for stacks of 15% for a by-product coke oven battery on a normal coking cycle or 20% for a by-product coke oven battery on battery-wide extended coking, follow the test methods and procedures in items 1 through 3 below: 1. Using the continuous opacity monitoring system (COMS) required in 63.7330(e) of 40 CFR 63, measure and record the opacity of emissions from each battery stack for a 24-hour period. 2. Reduce the monitoring data to hourly averages as specified in 63.8(g)(2) of 40 CFR 63; and 3. Compute and record the 24-hour (daily) average of the COMS data. For each by-product coke oven battery stack subject to an opacity limit in 63.7296(a) of 40 CFR 63, the permttee shall submit a notification of compliance status containing the COMS performance test.	40 CFR 63, 63.7324 63.7326(d) Chapter 18
	Section 4—Operation and Maintenance Requirements	
13	Good Engineering Paractices & Minimize Emissions to the Level of Subpart CCCCC A. A required by 63.6(e)(1)(i) of 40 CFR 63, the permittee shall operate and maintain the affected source (batteries), including the air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart. 1. The permittee must prepare and operate at all times according to a written operating and maintenance plan for the general operation and maintenance of the existing by-product coke oven batteries. Each plan must address, at a minimum, the elements listed as follows: a. Frequency and method of recording underfire gas parameters; b. Frequency and method of recording battery operating temperature, including measurement of individual flue and cross-wall temperatures; c. Procedures to prevent overcharging and undercharging of ovens, including measurement of coal moisture, coal bulk density, and procedures for determining volume of coal charged; d. Frequency and procedures for inspecting flues, burners, and nozzles; and e. The operating and maintenance plan must include requirements to repair any defects or deficiencies noted in inspections as described in Permit Condition 15 of this emissions unit. Repairs are to be made before the next scheduled inspection.	40 CFR 63, 63.7300 63.7331 Chapter 18

14	Subpart CCCCC—COMS—Operation, and Maintenance Requirements For Monitors For each by-product coke oven battery, the permittee shall install, operate, and maintain a COMS to measure and record the opacity of emissions existing each stack according to the following requirements: A. Install, operate, and maintain each COMS according to the requirements in 63.8(e) of 40 CFR 63, and Performance Specification 1 in 40 CFR 60, Appendix B. Identify periods the COMS is out-of-control, including any periods that the COMS fails to pass a daily calibration drift. assessment, quarterly performance audit, or annual zero alignment audit. B. The permittee shall conduct a performance evaluation of each COMS according to the requirements in Section 63.8 and Performance Specification 1 in Appendix B to 40 CFR 60. C. The permittee shall develop and implement a quality control program for operating and maintaining each COMS according to the requirements in 63.8(d) of 40 CFR 63. At minimum, the quality control program must include a daily calibration drift assessment, quarterly performance audit, and a annual zero alignment audit of each COMS. D. Each COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. The permittee shall reduce the COMS data as specified in 63.8(g)(2) of 40 CFR 63. E.. The permittee shall determine and record the hourly and daily (24-hour) average opacity according to the procedures in 63.7324(b) of 40 CFR 63 using all the 6-minute averages collected for periods during which the COMS is not out-of-control. F. The Department shall be notified in writing 2 weeks prior to the COMS annual audit.	40 CFR 63 63.7331 Chapter 18
	Section 5 – Continuous Emission Monitoring	
15	Subpart CCCCC—Monitoring A. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously at all times the affected source is operating. B. The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels.	40 CFR 63 63.7332 Chapter 18
	Section 6-Recordkeeping and Reporting Requirements	
16	Subpart CCCCC—Reporting Requirements Unless the Administrator has approved a different schedule, the permittee shall submit quarterly compliance reports for battery stacks. A. The first quarterly compliance report for battery stacks must cover the period beginning on the compliance date that is specified for your affected source in 63.7283 of 40 CFR 63, and ending on the last date of the third calendar month. Each subsequent compliance report must cover the next calendar quarter. B. A quarterly compliance report for battery stacks must be postmarked or delivered no later than one calendar month following the end of the quarterly reporting period. C. The content of each quarterly report must provide information on compliance with the emission limitations for battery stacks in 63.7296 of 40 CFR 63. The reports must meet the requirements in 63.7341(b) of 40 CFR 63.	40 CFR 63 63.7341 Chapter 18

17	Subpart CCCCC—Recordkeeping A. The permittee shall keep the following records: 1. A copy of each notification and report that the permittee submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that the permittee submitted, according to requirements in 63.10(b)(2)(xiv) of 40 CFR 63; 2. The records in 63.6(e)(3)(iii) through (v) of 40 CFR 63, related to startup, shutdown, and malfunction; and 3. Records of performance tests, performance evaluations, and opacity observations as required by 63.10(b)(2)(viii) of 40 CFR 63 B. For each COMS, the permittee must keep the records below: 1. Records described in 63.10(b)(2)(vi) through (xi) of 40 CFR 63; 2. Monitoring data for COMS during a performance evaluation as required in 63.6(h)(7)(i) and (ii) of 40 CFR 63; 3. Previous versions of the performance evaluation plan as required in 63.8(d)(3) of 40 CFR 63; and 4. Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period	40 CFR 63, 63.7342 Chapter 18
18	Subpart CCCCC—Record Retention The permittee shall keep records in a form suitable and readily available for expeditious review, according to 63.10(b)(1) of 40 CFR 63. As specified in 63.10(b)(1) of 40 CFR 63, the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record. The permittee shall keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record in accordance with 63.10(b)(1) of 40 CFR 63. The permittee can keep the records offsite for the remaining 3 years.	40 CFR 63, 63.7343 Chapter 18
19	Department Required Annual Report Requirement The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation; B. The quantity of coke oven gas burned in million cubic feet; C. The average monthly total sulfur content and heat content of coke oven gas; and D. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Regulations.	1.5.15 2.1.3 18.5.3

Emissions Unit Operating Permit Summary

Emissions Unit No.: 008

Company: ABC Coke

Source Description: Underfire Stack Coke Oven Battery No. 1

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20% Opacity/3-Minute Average per 60-Minute Period	Section 6.9.8
Visible Emissions (VE)	20% Opacity during batterywide extended coking cycle; 15% Opacity during normal coking cycle (Tall battery greater than 5 meters in height)	40 CFR 63 (Subpart CCCCC)
Particulate Matter (PM)	0.10 lbs/MMBTU of Heat Input (Max. Capacity)	Part 6.3
Particulate Matter (PM_{10})	N/A	N/A
Sulfur Dioxide (SO_2)	1.8 lbs/MMBTU of Heat Input	Section 7.1.1
Nitrogen Oxides (NOx)	N/A	N/A
Carbon Monoxide (CO)	N/A	N/A
Volatile Organic Compounds (VOC)	N/A	N/A

Pollution Control Device: None

Continuous Emission Monitors: None

Continuous Compliance Determiner:
Daily Recordkeeping of Fuels Coke Oven Gas Combusted
Maximum Heat Input Restricted to 360 MMBTU/hour
Monthly Testing of COG Sulfur Content
Restricted to Coke Oven Gas Combustion
Operation of COMs-24 hour (daily average) of data
Work Practice Standards
Operation and Maintenance Requirements
Start-up, Shutdown, and Maintenance Plan

Title V Monitoring:
Twice Weekly Visible Emissions Observation of Combustion Stack;
Installation of COMS
Monthly Sampling & Testing of COG Sulfur Content
Monthly Sampling & Testing of COG Heat Content

EPA Reference Test Methods: 1, 2, 3, 4, 5, 6, 7 and 9 of 40 CFR 60, Appendix A

Reporting Requirements: See Section 6

Applicable Regulations: Section 1.5.15, Section 2.1.3, Part 6.1, Part 6.3, Section 6.9.8, Part 7.1, Section 7.1.1, Part 18.5, Section 18.5.3, 40 CFR 60, 40 CFR 63

No.	Permit Conditions for Emissions Unit No. 008	Regulation
	Section 1 – Applicability	
1	Applicability The Emissions Unit 008, Underfire Stack of Batteries No. 1, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including ducts, fuel-feeding equipment, combustion controls, stacks and chimneys, and the combustion fuels used. The emissions unit is subject to the particulate emission rate allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Regulations. The emissions unit is subject to the visible emissions restrictions under Section 6.9.8, entitled "Combustion Stacks," of the Regulations. The emissions unit is subject to Part 7.1, entitled "Fuel Combustion," of the Regulations. The emissions unit is subject to the major source emissions fees of Chapter 16 of the Regulations. The emissions unit is subject to Title V permitting requirements of Chapter 18 of the Regulations.	6.3 6.9.8 7.1 Chapter 16 Chapter 18
2	General Compliance Requirements The permittee shall be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in Section 63.2.	40 CFR 63 Chapter 18
3	Startup, Shutdown, and Malfunction Plan The permittee shall develop and implement a written startup, shutdown, and malfunction plan according to the provisions of 63.6(e)(3) of 40 CFR 63. For COMS, a monitoring malfunction is any sudden, infrequent, not reasonably preventive failure of the monitor to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.	40 CFR 63 63.7332 Chapter 18
4	Subpart CCCCC The Emissions Unit No. 008 herein is subject to the requirements as listed in Subpart CCCCC (National Emissions Standards for Hazardous Air Pollutants for Coke Ovens) of Part 63 of Title 40 of the Code of Federal Regulations.	40 CFR 63 Chapter 18
	Section 2 -- Emission, Equipment or Production Requirements and Limitations	
5	Visible Emissions Restriction The Emissions Unit No. 008 shall comply with the visible emissions requirements under Section 6.9.8 of the Rules and Regulations. There shall be no visible emissions, other than water mist or vapor, with an opacity greater than 20% from the combustion stack except for a period or periods aggregating not more than 3 minutes in any consecutive 60 minutes. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60. The permittee shall perform a visual observation of the emission unit's combustion stack and make a record of the visual observation at least twice per week for a period of 15 minutes or more. If any visible emissions (greater than 15% opacity) are observed, the permittee shall expeditiously correct the problem causing the emission unit to emit visible emissions and make a record of the event and the corrective actions. If the visible emissions cannot be corrected, the permittee shall have a certified Reference Method 9 observer determine the combustion stack's opacity within 24 hours.	2.1.3 6.9.8 18.5.3(a)(2)
6	Subpart CCCCC - Emissions Limitation The permittee shall not discharge to the atmosphere any emissions from any battery stack at a existing by-product coke oven battery that exhibit an opacity greater than the applicable limits shown below: A. Daily average of 15% opacity for a battery on a normal coking cycle; or B. Daily average of 20% opacity for a battery on a battery-wide extended coking	40 CFR 63, 63.7296 Chapter 18

7	Particulate Emissions Restriction The Emissions Unit permitted herein is subject to and shall comply with the particulate emission rate restriction that is allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Regulations. The permittee shall not cause or allow the emissions of particulate matter from the fuel-burning equipment permitted herein in excess of 0.10 pounds per million BTU of heat input (at 360 MMBTU/hr) as determined by EPA Reference Method 5 of Appendix A of 40 CFR 60, July 1, 2008, as the same may be amended or revised. To comply with Title V monitoring requirements, the permittee shall demonstrate compliance with this emission limit by certifying to the Department in writing that only clean coke oven gas is combusted in the emissions unit. This written certification shall be submitted biennially.	2.1.3 6.3 18.5 18.5.3(a)(2)
8	Sulfur Oxides Emissions Restriction The Emissions Unit permitted herein is subject to and shall comply with the sulfur oxide emission rate restriction that is allowed under Section 7.1.1 of the Rules and Regulations. The permittee shall not cause or allow the emissions of sulfur oxides, measured as sulfur dioxide, from the fuel-burning equipment permitted herein in excess of 1.8 pounds per million BTU of heat input as determined by EPA Reference Method 6C of Appendix A of 40 CFR 60, July 1, 2008, as the same may be amended or revised. To comply with Title V monitoring requirements, the permittee shall collect monthly samples of coke oven gas and analyze them for sulfur content (hydrogen sulfide) by weight. The permittee shall also determine the heat content of each fuel sample. The emissions unit is restricted to combusting coke oven gas.	2.1.3 7.1.1 18.5 18.5.3(a)(2)
9	Combustion Fuel Restriction The Emissions Unit permitted herein is restricted to combusting coke oven gas. This restriction shall be demonstrated by recording and maintaining a record of the amount (within ± 1% accuracy) of COG combusted each calendar day.	2.1.3 18.5
10	Heat Input Restriction The Emissions Unit permitted herein shall not exceed 360,000,000 BTUs per hour of heat input. This restriction shall be demonstrated by recording and maintaining a record of the amounts (within ± 1% accuracy/ ± 178 x 10^3 CF/day on a 18-hour coking cycle/134 x 10^3 CF/day on a 24-hour coking cycle) of fuel combusted and time operated each calendar day.	2.1.3 18.5
	Section 3 -- Compliance and Performance Test Methods and Procedures	
11	Test Methods and Procedures The permittee shall determine compliance with the particulate emissions, sulfur oxide emissions, and visible emissions restrictions of this permit by the following EPA's reference methods under 40 CFR 60, Appendix A, July 1, 2008, as the same may be amended or revised: Method 1: Sample and Velocity Traverses Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate Method 3: Gas Analysis for Carbon Monoxide, Oxygen, Excess Air, and Dry M. W. Method 4: Determination of Moisture Content in Stack Gases Method 5: Determination of Particulate Emissions Method 6C: Determination of Sulfur Dioxide Emissions Method 7: Determination of Nitrogen Oxide Emissions Method 9: Visual Determination of the Opacity of Emissions Tutwiler Method: Sulfur Content (H_2S) in Gas Mixtures Calorimeter: Determination of Heat Content of Fuels in BTU per Cubic Foot	2.1.3 40 CFR 60

12	Subpart CCCCC—Performance Testing The permittee shall conduct an initial and subsequent (continuous) performance test in accordance with the following: To determine compliance with the daily average opacity limit for stacks of 15% for a by-product coke oven battery on a normal coking cycle or 20% for a by-product coke oven battery on battery-wide extended coking, follow the test methods and procedures in items 1 through 3 below: 1. Using the continuous opacity monitoring system (COMS) required in 63.7330(e) of 40 CFR 63, measure and record the opacity of emissions from each battery stack for a 24-hour period. 2. Reduce the monitoring data to hourly averages as specified in 63.8(g)(2) of 40 CFR 63, and 3. Compute and record the 24-hour (daily) average of the COMS data. For each by-product coke oven battery stack subject to an opacity limit in 63.7296(a) 40 CFR 63, the permttee shall submit a notification of compliance status containing the COMS performance test.	40 CFR 63, 63.7324, and 63.7326(d) Chapter 18
	Section 4—Operation and Maintenance Requirements	
13	Good Engineering Paractices & Minimize Emissions to the Level of Subpart CCCCC A. A required by 63.6(e)(1)(i) 40 CFR 63, the permittee shall operate and maintain the affected source (batteries), including the air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart. 1. The permittee must prepare and operate at all times according to a written operating and maintenance plan for the general operation and maintenance of the existing by-product coke oven batteries. Each plan must address, at a minimum, the elements listed as follows: a. Frequency and method of recording underfire gas parameters; b. Frequency and method of recording battery operating temperature, including measurement of individual flue and cross-wall temperatures; c. Procedures to prevent overcharging and undercharging of ovens, including measurement of coal moisture, coal bulk density, and procedures for determining volume of coal charged; d. Frequency and procedures for inspecting flues, burners, and nozzles; and e. The operating and maintenance plan must include requirements to repair any defects or deficiencies noted in inspections as described in Permit Condition 15 of this emissions unit. Repairs are to be made before the next scheduled inspection.	40 CFR 63, 63.7300, and 63.7331 Chapter 18

14	Subpart CCCCC—COMS—Operation, and Maintenance Requirements For Monitors For each by-product coke oven battery, the permittee shall install, operate, and maintain a COMS to measure and record the opacity of emissions existing each stack according to the following requirements: A. Install, operate, and maintain each COMS according to the requirements in 63.8(e) of 40 CFR 63 and Performance Specification 1 in 40 CFR 60, Appendix B. Identify periods the COMS is out-of-control, including any periods that the COMS fails to pass a daily calibration drift. assessment, quarterly performance audit, or annual zero alignment audit. B. The permittee shall conduct a performance evaluation of each COMS according to the requirements in 63.8 of 40 CFR 63, and Performance Specification 1 in Appendix B to 40 CFR 60. C. The permittee shall develop and implement a quality control program for operating and maintaining each COMS according to the requirements in 63.8(d) of 40 CFR 63. At minimum, the quality control program must include a daily calibration drift assessment, quarterly performance audit, and a annual zero alignment audit of each COMS. D. Each COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. The permittee shall reduce the COMS data as specified in 63.8(g)(2) of 40 CFR 63. E.. The permittee shall determine and record the hourly and daily (24-hour) average opacity according to the procedures in 63.7324(b) of 40 CFR 63 using all the 6-minute averages collected for periods during which the COMS is not out-of-control. F. The Department shall be notified in writing 2 weeks prior to the COMS annual audit.	40 CFR 63 63.7331 Chapter 18
	Section 5 – Continuous Emission Monitoring	
15	Subpart CCCCC—Monitoring A. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously at all times the affected source is operating. B. The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels.	40 CFR 63 63.7332 Chapter 18
	Section 6-Recordkeeping and Reporting Requirements	
16	Subpart CCCCC—Reporting Requirements Unless the Administrator has approved a different schedule, the permittee shall submit quarterly compliance reports for battery stacks. A. The first quarterly compliance report for battery stacks must cover the period beginning on the compliance date that is specified for your affected source in 63.7283 of 40 CFR 63, and ending on the last date of the third calendar month. Each subsequent compliance report must cover the next calendar quarter. B. A quarterly compliance report for battery stacks must be postmarked or delivered no later than one calendar month following the end of the quarterly reporting period. C. The content of each quarterly report must provide information on compliance with the emission limitations for battery stacks in 63.7296 of 40 CFR 63. The	40 CFR 63 63.7341 Chapter 18

	reports must meet the requirements in 63.7341(b) of 40 CFR 63.	
17	Subpart CCCCC—Recordkeeping A. The permittee shall keep the following records: 1. A copy of each notification and report that the permittee submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that the permittee submitted, according to requirements in 63.10(b)(2)(xiv) of 40 CFR 63. 2. The records in 63.6(e)(3)(iii) through (v) of 40 CFR 63 related to startup, shutdown, and malfunction; and 3. Records of performance tests, performance evaluations, and opacity observations as required by 63.10(b)(2)(viii) of 40 CFR 63. B. For each COMS, the permittee must keep the records below: 1. Records described in Paragraphs 63.10(b)(2)(vi) through (xi) of 40 CFR 63; 2. Monitoring data for COMS during a performance evaluation as required in 63.6(h)(7)(i) and (ii) of 40 CFR 63; 3. Previous versions of the performance evaluation plan as required in 63.8(d)(3) of 40 CFR 63; and 4. Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.	40 CFR 63, 63.7342 Chapter 18
18	Subpart CCCCC—Record Retention The permittee shall keep records in a form suitable and readily available for expeditious review, according to 63.10(b)(1) of 40 CFR 63. As specified in 63.10(b)(1) of 40 CFR 63, the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record. The permittee shall keep each record onsite for a least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record in accordance with 63.10(b)(1) of 40 CFR 63. The permittee can keep the records offsite for the remaining 3 years.	40 CFR 63, 63.7343 Chapter 18
19	Department Required Annual Report Requirement The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation B. The quantity of coke oven gas burned in million cubic feet C. The average monthly total sulfur content and heat content of coke oven gas D. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Regulations	1.5.15 2.1.3 18.5.3

Emissions Unit Operating Permit Summary

Emissions Unit No.: 018

Company: ABC Coke

Source Description: South Coke Quenching Tower

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used: None

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Particulate Matter	34.65 pounds per hour	Part 6.4
Total Dissolved Solids (TDS) or the Sum of the Concentration of benzene, benzo(a)pyrene, and naphthalene	TDS shall not exceed 1,100 milligrams per liter (mg/l) in water; or not to exceed the applicable site-specific limit approved by the permitting authority for benzene, benzo(a)pyrene, and naphthalene	Subpart CCCCC

Pollution Control Device: Baffles

Continuous Emission Monitors: None

Continuous Compliance Determiner: Equipment and Work Practice Standards

Title V Monitoring: Weekly Testing of Quench Tower Water if TDS Content is Selected, or Monthly if Maintaining the Sum of the Concentrations of Benzene, Benzo(a)pyrene, and the Napthalene Used to Quench Hot Coke

EPA Reference Test Methods: 9 of 40 CFR 60, Part 1.10, Method 160.1 of 40 CFR 136.3

Reporting Requirements: See Condition No. 7

Applicable Regulations: Section 1.5.15, Section 1.9.1, Part 1.10, Section 2.1.3, Part 6.1, Part 6.2, Part 6.4, Section 6.9.9, Part 18.5, Part 18.7, 40 CFR 60

No.	Permit Conditions for Emissions Unit No. 018	Regulation
	Section 1 – Applicability	
1	Applicability The Emissions Unit, South Coke Quenching Tower, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including quenching towers and quench water. The emissions unit is subject to Section 6.9.9, entitled "Quenching," of the Rules and Regulations: A. No person shall operate a coke oven plant without baffles installed and properly operating in the quench towers. B. Water introduced to the quenching station must be of a quality approved by the Health Officer. The emissions unit is subject to Chapter 18 of the Rules and Regulations.	2.1.3 6.1 6.9.9 Chapter 18
	Section 2 -- Emission, Equipment or Production Requirements and Limitations	
2	Visible Emissions Restriction The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60. To comply with Title V emissions monitoring requirements, the permittee shall perform a visual observation of the emission unit's exhaust system and make a record of the visual observation at least once per month. If any visible emissions are observed, the permittee shall correct the problem causing the emission unit to emit visible emissions and make a record of the event and the corrective actions. The permittee shall make such repairs within 1 calendar month of the observation.	2.1.3 6.1.1 18.5
3	Subpart CCCCCC—Required Limitations The permittee shall meet the requirements in the following paragraphs related to quench water limitations: A. For the quenching of hot coke the concentration of total dissolved solids (TDS) in the water used for quenching must not exceed 1,100 milligrams per liter (mg/l); or B. The sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used for quenching must not exceed the applicable site-specific limit approved by the permitting authority.	40 CFR 63, 63.7295
	Section 3 -- Compliance and Performance Test Methods and Procedures	Regulation
4	Test Methods and Procedures Every month the permittee shall perform an analysis for dissolved solids of the water to the quench tower. The samples shall be taken after the makeup water has been mixed with the water recycled from the sump and the analysis shall be done in accordance with the Standard Methods for the Examination of Water and Wastewater.	1.9.1 1.10 2.1.3

5	Subpart CCCCC—Test Methods If the permittee elects the TDS limit for quench water, 63.7295(a)(1)(i) of 40 CFR 63, the permittee shall conduct each performance test that applies to the affected source according to the conditions as follows: A. Take the quench water sample from a location that provides a representative sample of the quench water as applied to the coke. The Department requires the sample location from the header that feeds water to the quench tower reservoirs or an alternate location approved by this Department. The permittee shall use acceptable makeup water, as defined in 63.7352 of the 40 CFR 63. B. Determine the TDS concentration of the sample using Method 160.1 in 40 CFR Part 136.3. C. If at any time the permittee elects to meet the alternate requirements, for quench water in Paragraph 63.7295(a)(1)(ii), the permittee must establish a site-specific constituent limit according to the procedures in 63.7325 (b)(1) through (4) of 40 CFR 63.	40 CFR 63, 63.7325 and 63.7295
	Section 4 – Emissions Monitoring	
6	Subpart CCCCC—Monitoring Beginning on the first day that compliance is required under 63.7283 of 40 CFR 63, and subsequent, the permittee shall demonstrate continuous compliance with the TDS limit for quenching in 63.7295(a)91)(i) of 40 CFR 63, by meeting the following requirements: A. Maintaining the TDS content of the water used to quench the hot coke at 1,100 mg/l or less; and 1. Measuring the TDS content of the quench water at least weekly according to the requirements in 63.7325(a) of 40 CFR 63, and recording the sample results; or 2. Demonstrating continuous compliance with the constituent limit for quenching in 63.7295(a)(1)(ii) of 40 CFR 63, by the following requirements: B. Maintaining the sum of the concentration of benzene, benzo(a)pyrene, and naphthalene in water used to quench hot coke at levels less than or equal to the site-specific limit approved by the permitting authority; and determining the sum of the constituent concentrations at least monthly according to the requirements in 63.7325(c) of 40 CFR 63, and recording the sample results.	40 CFR 63, 63.7333
7	Department Required Annual Report Requirement The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The quantity (in tons) of coal charged to the batteries associated with this emissions unit; B. The actual and allowable emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations; and C. The 12-month analysis for dissolved solids of the quench tower water.	2.1.3 18.5 18.7 40 CFR 63

Emissions Unit Operating Permit Summary

Emissions Unit No.: 019

Company: ABC Coke

Source Description: 204 MMBTU/Hr Babcock & Wilcox. Designated Boiler No. 8.

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Particulate Matter (PM)	0.133 lbs/MMBTU of Heat Input (Max. Capacity)	Part 6.3
Sulfur Dioxide (SO_2)	1.8 lbs/MMBTU of Heat Input	Section 7.1.1
Nitrogen Oxides (NOx)	NA	NA
Carbon Monoxide (CO)	NA	NA
Volatile Organic Compounds (VOC)	NA	NA

Pollution Control Device: None

Continuous Emission Monitors: None

Continuous Compliance Determiner:
Daily Recordkeeping of Fuel Combusted
Maximum Heat Input Restricted to 204 MMBTU/hour
Coke Oven Gas Restricted to 5,957 MMCF/year for Boilers 7, 8, 9 and the Flare.
Natural Gas Restricted to less than ten percent (10%) of the Total Fuel Usage for Boilers 7,8, and 9
Restricted to Coke Oven Gas/Natural Gas Combustion

Title V Monitoring:
Daily Visible Emissions Observation of Boiler Stack
Daily Fuel Combustion Metering (± 1% accuracy)
Monthly Sampling & Testing of Fuel Sulfur Content (COG)
Monthly Sampling & Testing of Fuel Heat Content (COG)

EPA Reference Test Methods: 1, 2, 3, 4, 5, 6, 7 and 9 of 40 CFR 60, Appendix A

Reporting Requirements: Permit Condition No. 10

Applicable Regulations:
Sections 2.1.3, 6.1.1 and 7.1.1
Parts 6.3 and 18.5
Chapters 2, 6, 7, 16 and 18

No.	Permit Conditions for Emissions Unit No. 019	Regulation
	Section 1 – Applicability	
1	Applicability The Emissions Unit, 204 MMBTU/hour boiler, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including ducts, breechings, fuel-feeding equipment, ash removal equipment, combustion controls, stacks and chimneys, and the combustion fuels used. The emissions unit is subject to Part 6.1, entitled "Visible Emissions," of the Rules and Regulations. The emissions unit is subject to the particulate emission rate allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Rules and Regulations. The emissions unit is subject to Part 7.1, entitled "Fuel Combustion," of the Rules and Regulations. The emissions unit is subject to Chapter 18 of the Rules and Regulations.	2.1.3 6.1 6.3 7.1 Chapter 18
	Section 2 -- Emission, Equipment or Production Requirements and Limitations	
2	Visible Emissions Restriction The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60.	2.1.3 6.1.1 18.5
3	Particulate Emissions Restriction The Emissions Unit permitted herein is subject to and shall comply with the particulate emission rate restriction that is allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Rules and Regulations. The permittee shall not cause or allow the emissions of particulate matter from the fuel-burning equipment permitted herein in excess of 0.133 pounds per million BTU of heat input (at 204 MMMBTU/hr) as determined by EPA Reference Method 5 of Appendix A of 40 CFR 60, July 1, 2008, as the same may be amended or revised. For Title V monitoring requirements, the permittee shall demonstrate compliance with this emission limit by certifying to the Department in writing that only coke oven gas and natural gas is combusted in the emissions unit. This written certification shall be submitted biennially.	2.1.3 6.3 18.5
4	Sulfur Oxides Emissions Restriction The Emissions Unit permitted herein is subject to and shall comply with the sulfur oxide emission rate restriction that is allowed under Section 7.1.1 of the Rules and Regulations. The permittee shall not cause or allow the emissions of sulfur oxides, measured as sulfur dioxide, from the fuel-burning equipment permitted herein in excess of 1.8 pounds per million BTU of heat input as determined by EPA Reference Method 6C of Appendix A of 40 CFR 60, July 1, 2008, as the same may be amended or revised. For Title V monitoring requirements, the permittee shall collect monthly samples of coke oven gas and analyze the coke oven gas for sulfur content by weight. The permittee shall also determine the heat content of the coke oven gas sampled. The emissions unit is restricted to combusting coke oven gas and natural gas.	2.1.3 7.1.1 18.5

No.	Permit Conditions for Emissions Unit No. 019	Regulation
5	Combustion Fuel Restriction The Emissions Unit permitted herein is restricted to combusting coke oven gas/natural gas. This restriction shall be demonstrated by recording and maintaining a record of the amount (within ± 1% accuracy) of each fuel combusted each calendar day.	2.1.3 18.5
6	Heat Input Restriction The Emissions Unit permitted herein shall not exceed 204,000,000 BTUs per hour of heat input. This restriction shall be demonstrated by recording and maintaining a record of the amounts (within ± 1% accuracy) of fuel combusted and time operated each calendar day.	2.1.3 18.5
7	New Source Review Combustion Fuel Restriction The permittee shall not cause or allow the Emissions Unit Nos. 020, 019, 001, and 031 (Boiler Nos. 7, 8, 9, and Flare) to exceed combusting 5,957 million (MM) cubic feet per year of coke oven gas in any 12-month period based on an annual rolling average as defined in Part 1.3 of the Rules and Regulations. This restriction shall be demonstrated by recording and maintaining a record of the amount (within ± 1% accuracy) of each fuel combusted in each boiler and time each boiler operated per calendar day.	2.1.3 18.5
	Section 3 -- Compliance and Performance Test Methods and Procedures	Regulation
8	Test Methods and Procedures The permittee shall determine compliance with the particulate emissions, sulfur oxide emissions, and visible emissions restrictions of this permit by the following EPA's reference methods under 40 CFR 60, Appendix A, July 1, 2008, as the same may be amended or revised: Method 1: Sample and Velocity Traverses Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate Method 3: Gas Analysis for Carbon Monoxide, Oxygen, Excess Air, and Dry M. W. Method 4: Determination of Moisture Content in Stack Gases Method 5: Determination of Particulate Emissions Method 6C: Determination of Sulfur Dioxide Emissions Method 7: Determination of Nitrogen Oxide Emissions Method 9: Visual Determination of the Opacity of Emissions Tutwiler Method: Sulfur Content (H_2S, hydrogen sulfide) in Gas Mixtures Calorimeter: Determination of Heat Content of Fuels in BTU per Cubic Foot	2.1.3 40 CFR 60
	Section 4 – Continuous Emission Monitoring – Not Applicable	
	Section 5 -- Recordkeeping and Reporting Requirements	
9	Department Required Annual Report Requirement The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation differentiation between hours of combusting coke oven gas and natural gas; B. The actual and allowable emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations; C. The quantity of coke oven gas and natural gas burned in million cubic feet; and D. The average monthly total sulfur content and heat content of the coke oven gas.	1.5.15 2.1.3 18.5.3

Emissions Unit Operating Permit Summary

Emissions Unit No.: 020

Company: ABC Coke

Source Description: 204 MMBTU/Hr Babcock & Wilcox. Designated Boiler No. 7.

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Particulate Matter (PM)	0.133 lbs/MMBTU of Heat Input (Max. Capacity)	Part 6.3
Sulfur Dioxide (SO_2)	1.8 lbs/MMBTU of Heat Input	Section 7.1.1
Nitrogen Oxides (NOx)	NA	NA
Carbon Monoxide (CO)	NA	NA
Volatile Organic Compounds (VOC)	NA	NA

Pollution Control Device: None

Continuous Emission Monitors: None

Continuous Compliance Determiner:
Daily Recordkeeping of Fuel Combusted
Maximum Heat Input Restricted to 204 MMBTU/hour
Coke Oven Gas Restricted to 5,957 MMCF/year for Boilers 7, 8, 9, and the Flare.
Natural Gas Restricted to less than ten percent (10%) of the Total Fuel Usage for Boilers 7,8, and 9
Restricted to Coke Oven Gas/Natural Gas Combustion

Title V Monitoring:
Daily Visible Emissions Observation of Boiler Stack
Daily Fuel Combustion Metering (± 1% accuracy)
Monthly Sampling & Testing of Fuel Sulfur Content (COG)
Monthly Sampling & Testing of Fuel Heat Content (COG)

EPA Reference Test Methods: 1, 2, 3, 4, 5, 6, 7 and 9 of 40 CFR 60, Appendix A

Reporting Requirements: Permit Condition No. 10

Applicable Regulations:
Sections 2.1.3, 6.1.1 and 7.1.1
Parts 6.3 and 18.5
Chapters 2, 6, 7, 16 and 18

No.	Permit Conditions for Emissions Unit No. 020	Regulation
	Section 1 – Applicability	
1	Applicability The Emissions Unit, 204 MMBTU/hour boiler, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including ducts, breechings, fuel-feeding equipment, ash removal equipment, combustion controls, stacks and chimneys, and the combustion fuels used. The emissions unit is subject to Part 6.1, entitled "Visible Emissions," of the Rules and Regulations. The emissions unit is subject to the particulate emission rate allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Rules and Regulations. The emissions unit is subject to Part 7.1, entitled "Fuel Combustion," of the Rules and Regulations. The emissions unit is subject to Chapter 18 of the Rules and Regulations.	2.1.3 6.1 6.3 7.1 Chapter 18
	Section 2 -- Emission, Equipment or Production Requirements and Limitations	
2	Visible Emissions Restriction The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60.	2.1.3 6.1.1 18.5
3	Particulate Emissions Restriction The Emissions Unit permitted herein is subject to and shall comply with the particulate emission rate restriction that is allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Rules and Regulations. The permittee shall not cause or allow the emissions of particulate matter from the fuel-burning equipment permitted herein in excess of 0.133 pounds per million BTU of heat input (at 204 MMMBTU/hr) as determined by EPA Reference Method 5 of Appendix A of 40 CFR 60, July 1, 2008, as the same may be amended or revised. For Title V monitoring requirements, the permittee shall demonstrate compliance with this emission limit by certifying to the Department in writing that only coke oven gas and natural gas is combusted in the emissions unit. This written certification shall be submitted biennially.	2.1.3 6.3 18.5
4	Sulfur Oxides Emissions Restriction The Emissions Unit permitted herein is subject to and shall comply with the sulfur oxide emission rate restriction that is allowed under Section 7.1.1 of the Rules and Regulations. The permittee shall not cause or allow the emissions of sulfur oxides, measured as sulfur dioxide, from the fuel-burning equipment permitted herein in excess of 1.8 pounds per million BTU of heat input as determined by EPA Reference Method 6C of Appendix A of 40 CFR 60, July 1, 2008, as the same may be amended or revised. For Title V monitoring requirements, the permittee shall collect monthly samples of coke oven gas and analyze the coke oven gas for sulfur content by weight. The permittee shall also determine the heat content of the coke oven gas sampled. The emissions unit is restricted to combusting coke oven gas and natural gas.	2.1.3 7.1.1 18.5

No.	Permit Conditions for Emissions Unit No. 020	Regulation
5	Combustion Fuel Restriction The Emissions Unit permitted herein is restricted to combusting coke oven gas/natural gas. This restriction shall be demonstrated by recording and maintaining a record of the amount (within ± 1% accuracy) of each fuel combusted each calendar day.	2.1.3 18.5
6	Heat Input Restriction The Emissions Unit permitted herein shall not exceed 204,000,000 BTUs per hour of heat input. This restriction shall be demonstrated by recording and maintaining a record of the amounts (within ± 1% accuracy) of fuel combusted and time operated each calendar day.	2.1.3 18.5
7	New Source Review Combustion Fuel Restriction The permittee shall not cause or allow Emissions Units Nos. 020, 019, 001, and 031 (Boiler Nos. 7, 8, 9, and Flare) to exceed combusting 5,957 million (MM) cubic feet per year of coke oven gas in any 12-month period based on an annual rolling average as defined in Part 1.3 of the Rules and Regulations. This restriction shall be demonstrated by recording and maintaining a record of the amount (within ± 1% accuracy) of each fuel combusted in each boiler and time each boiler operated per calendar day.	2.1.3 18.5
	Section 3 -- Compliance and Performance Test Methods and Procedures	Regulation
8	Test Methods and Procedures The permittee shall determine compliance with the particulate emissions, sulfur oxide emissions, and visible emissions restrictions of this permit by the following EPA's reference methods under 40 CFR 60, Appendix A, July 1, 2008, as the same may be amended or revised: Method 1: Sample and Velocity Traverses Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate Method 3: Gas Analysis for Carbon Monoxide, Oxygen, Excess Air, and Dry M. W. Method 4: Determination of Moisture Content in Stack Gases Method 5: Determination of Particulate Emissions Method 6C: Determination of Sulfur Dioxide Emissions Method 7: Determination of Nitrogen Oxide Emissions Method 9: Visual Determination of the Opacity of Emissions Tutwiler Method: Sulfur Content (H_2S, hydrogen sulfide) in Gas Mixtures Calorimeter: Determination of Heat Content of Fuels in BTU per Cubic Foot	2.1.3 40 CFR 60
	Section 4 – Continuous Emission Monitoring – Not Applicable	
	Section 5 -- Recordkeeping and Reporting Requirements	
9	Department Required Annual Report Requirement The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation differentiation between hours of combusting coke oven gas and natural gas; B. The actual and allowable emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations; C. The quantity of coke oven gas and natural gas burned in million cubic feet; and D. The average monthly total sulfur content and heat content of the coke oven gas.	1.5.15 2.1.3 18.5.3

Emissions Unit Operating Permit Summary

Emissions Unit No.: 024

Company: ABC Coke

Source Description: North Coke Quenching Tower

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used: None

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Particulate Matter	30.34 pounds per hour	Part 6.4
Total Dissolved Solids (TDS) or the Sum of the Concentration of benzene, benzo(a)pyrene, and napthalene	TDS shall not exceed 1,100 milligrams per liter (mg/l) in water; or not to exceed the applicable site-specific limit approved by the permitting authority for benzene, benzo(a) pyrene, and napthalene	Subpart CCCCC

Pollution Control Device: Baffles

Continuous Emission Monitors: None

Continuous Compliance Determiner: Equipment and Work Practice Standards

Title V Monitoring: Weekly Testing of Quench Tower Water if TDS Content is Selected, or Monthly if Maintaining the Sum of the Concentrations of Benzene, Benzo(a)pyrene, and the Napthalene Used to Quench Hot Coke

EPA Reference Test Methods: 9 of 40 CFR 60, Part 1.10, Method 160.1 of 40 CFR 136.3

Reporting Requirements: Condition No. 7

Applicable Regulations: Section 1.5.15, Section 1.9.1, Part 1.10, Section 2.1.3, Part 6.1, Part 6.2, Part 6.4, Section 6.9.9, Part 18.5, Part 18.7, 40 CFR 60

No.	Permit Conditions for Emissions Unit No. 024	Regulation
	Section 1 – Applicability	
1	Applicability The Emissions Unit, North Coke Quenching Tower, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including quenching towers and quench water. The emissions unit is subject to Section 6.9.9, entitled "Quenching," of the Rules and Regulations: A. No person shall operate a coke oven plant without baffles installed and properly operating in the quench towers B. Water introduced to the quenching station must be of a quality approved by the Health Officer The emissions unit is subject to Chapter 18 of the Rules and Regulations.	2.1.3 6.1 6.9.9 Chapter 18
	Section 2 -- Emission, Equipment or Production Requirements and Limitations	
2	Visible Emissions Restriction The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60. To comply with Title V emissions monitoring requirements, the permittee shall perform a visual observation of the emission unit's exhaust system and make a record of the visual observation at least once per month. If any visible emissions are observed, the permittee shall correct the problem causing the emission unit to emit visible emissions and make a record of the event and the corrective actions. The permittee shall make such repairs within 1 calendar month of the observation.	2.1.3 6.1.1 18.5
3	Subpart CCCCCC—Required Limitations The permittee shall meet the requirements in the following paragraphs related to quench water limitations: A. For the quenching of hot coke the concentration of total dissolved solids (TDS) in the water used for quenching must not exceed 1,100 milligrams per liter (mg/l); or B. The sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used for quenching must not exceed the applicable site-specific limit approved by the permitting authority.	40 CFR 63, 63.7295
	Section 3 -- Compliance and Performance Test Methods and Procedures	Regulation
4	Test Methods and Procedures Every month the permittee shall perform an analysis for dissolved solids of the water to the quench tower. The samples shall be taken after the makeup water has been mixed with the water recycled from the sump and the analysis shall be done in accordance with the Standard Methods for the Examination of Water and Wastewater.	1.9.1 1.10 2.1.3

5	Subpart CCCCC—Test Methods If the permittee elects the TDS limit for quench water, 63.7295(a)(1)(i) of 40 CFR 63, the permittee shall conduct each performance test that applies to the affected source according to the conditions as follows: A. Take the quench water sample from a location that provides a representative sample of the quench water as applied to the coke. The Department requires the sample location from the header that feeds water to the quench tower reservoirs or an alternate location approved by this Department. The permittee shall use acceptable makeup water, as defined in 63.7352 of 40 CFR 63. B. Determine the TDS concentration of the sample using Method 160.1 in 40 CFR Part 136.3. C. If at any time the permittee elects to meet the alternate requirements, for quench water in 63.7295(a)(1)(ii) of 40 CFR 63, the permittee must establish a site-specific constituent limit according to the procedures in 63.7325(b)(1) through (4) of 40 CFR 63.	40 CFR 63, 63.7325 and 63.7295
	Section 4 – Emissions Monitoring	
6	Subpart CCCCC—Monitoring Beginning on the first day that compliance is required under 63.7283 of 40 CFR 63, and subsequent, the permittee shall demonstrate continuous compliance with the TDS limit for quenching in 63.7295(a)9(1)(i) of 40 CFR 63, by meeting the following requirements: A. Maintain the TDS content of the water used to quench the hot coke at 1,100 mg/l or less; and 1. Measuring the TDS content of the quench water at least weekly according to the requirements in 63.7325(a) of 40 CFR 63, and recording the sample results; or 2. Demonstrating continuous compliance with the constituent limit for quenching in 63.7295(a)(1)(ii) of 40 CFR 63, by the following requirements: B. Maintaining the sum of the concentration of benzene, benzo(a)pyrene, and naphthalene in water used to quench hot coke at levels less than or equal to the site-specific limit approved by the permitting authority; and determining the sum of the constituent concentrations at least monthly according to the requirements in 63.7325(c) of 40 CFR 63, and recording the sample results.	40 CFR 63, 63.7333
7	Department Required Annual Report Requirement The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The quantity (in tons) of coal charged to the batteries associated with this emissions unit; B. The actual and allowable emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations; and C. The 12-month analysis for dissolved solids of the quench tower water.	2.1.3 18.5 18.7 40 CFR 63

Emissions Unit Operating Permit Summary

Emissions Unit No.: 031

Company: ABC Coke

Source Description: Flare

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used: COG

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1

Pollution Control Device: None

Continuous Emission Monitors: None

Continuous Compliance Determiner: Daily Recordkeeping of Fuel Combusted
Coke Oven Gas Restricted to 5,957 MMCF/year (680 MCF/hr) for Boilers 7, 8, 9, and the Flare
Coke Oven Gas Usage shall be reduced by 1.86 MMCF/yr for each 1MMCF/yr of Natural Gas usage
Restricted to Coke Oven Gas

Title V Monitoring: Daily Fuel Combustion Metering (± 1% accuracy)
Monthly Sampling & Testing of Fuel Heat Content (COG)

EPA Reference Test Methods: 1, 2, 3, 4, 5, 6C, 7, 7E, 9, 10, 18, 25, 25A of 40 CFR 60, Appenix A

Reporting Requirements: Permit Condition No. 6

Applicable Regulations: Sections 1.5, 15, 2.1.3, 6.1.1, 18.5.3, 18.7.4
Part 18.5
Chapters 2, 6, 16 and 18

No.	Permit Conditions for Emissions Unit No. 031	Regulation
	Section 1 – Applicability	
1	Applicability The Emissions Unit, Flare, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including ducts, breeching, fuel-feeding equipment, combustion controls, stacks and chimneys, and the combustion fuels used. The emissions unit is subject to Part 6.1, entitled "Visible Emissions, "of the Rules and Regulations. The emissions unit is subject to Chapter 18 of the Rules and Regulations	2.1.3 6.1 Chapter 18
	Section 2 -- Emission, Equipment or Production Requirements and Limitations	
2	Visible Emissions Restriction The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60.	2.1.3 6.1.1 18.5
3	Combustion Fuel Restriction The Emissions Unit permitted herein is restricted to combusting coke oven gas. This restriction shall be demonstrated by recording and maintaining a record of the amount (± 1% accuracy) of each fuel combusted each calendar day.	2.1.3 18.5
4	Combustion Fuel Restriction: Boilers 7, 8, 9, and Flare The permittee shall not cause or allow the Emissions Unit No. 031 (Flare) permitted herein aggregated with Emissions Units Nos. 020, 019, and 001 (Boiler Nos.7, 8, and 9) to exceed combusting 5,957 (MMCF/yr) million cubic feet per year of coke oven gas in any 12-month period based on an annual rolling average as defined in Part 1.3 of the Rules and Regulations.	2.1.3 18.5
	Section 3 -- Compliance and Performance Test Methods and Procedures –N/A	
	Section 4 – Continuous Emissions Monitoring-N/A	
	Section 5- Recordkeeping and Reporting Requirements	
5	Combustion Fuel Restriction Records In accordance with the combustion fuel restrictions listed in this permit, the permittee shall keep a monthly record of the amount (± 1% accuracy) of coke oven gas combusted and the time of operation per calendar day for the permitted unit herein.	2.1.3 18.5.3
6	Department Required Annual Report Requirement The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation differentiation between hours of combusting coke oven gas and natural gas; B. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations; C. The quantity of coke oven gas and natural gas burned in million cubic feet; and D. The average monthly total heat content of the coke oven ga.s	1.5.15 2.1.3 18.5.3

Emissions Unit Operating Permit Summary

Emissions Unit No.: 032

Company: ABC Coke

Source Description: Coke Pushing Operations of Coke Battery Nos. 1, 5, and 6

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used: N/A

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standards
Visible Emissions (VE)	20% Opacity	Part 6.1
Visible Emissions (VE)	40% Opacity	Section 6.9.4
Particulate Matter (PM)	0.02 pounds per ton of coke (lb/ton)	Subpart CCCCC

Pollution Control Device: Baghouse

Continuous Emission Monitors: None

EPA Reference Test Methods: Method 1, 2, 2F, 2G, 3, 3A, 3B, 4, 5, 5D, 9 of Appendix A (40 CFR 60)

Reporting Requirements: See Section 6 & Permit Condition 9

Applicable Regulations: Section 1.5.15, Section 2.1.3, Part 6.1, Part 6.2, Part 6.4, Part 6.9, Part 18.5, Section 18.5.3, 40 CFR 60, 40 CFR 63

No.	Permit Conditions for Emissions Unit No. 032	Regulation
	Section 1 – Applicability	
1	Applicability Visible Emissions Restriction The Emissions Unit No. 032 including the push control system (hooding, ductwork, and hotcar) with baghouse permitted herein is subject to and shall comply with the requirements under Section 6.9.4, "Pushing" of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere visible emissions during the pushing cycle, other than water mist or vapor, to exceed forty percent (40%) for more than 1 push per hour per battery or for more than 2 consecutive pushes from the same oven. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, July 1, 2008, as the same may be amended or revised. Individual readings, however, will be instaneous as opposed to 6-min averages per Method 9. To comply with Title V monitoring requirements, the permittee shall perform a visual observation of the emission units (Batteries No's. 1, 5, & 6) once per month. If any visible emissions (greater than 40% opacity) are observed, the permittee shall immediately correct the problem causing the emission unit to emit visible emissions and make a record of the event and correct actions. Within 24 hours of the completion of corrective actions, the permittee shall again observe the emission unit. If visible emissions are present, a certified observer shall complete an EPA Method 9 Visible Emissions Evaluation within 3 business days to establish compliance with the above opacity limitation. The date, time, and type of corrective action initiated to eliminate the visible emissions and the date and time the corrective actions were completed shall be provided in the same record that contained the initial observation.	6.9.4 18.5 40 CFR 60
2	General Compliance Requirements The permittee shall be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in 63.2 of 40 CFR 63.	40 CFR 63 Chapter 18
3	Startup, Shutdown, and Malfunction Plan The permittee shall develop and implement a written startup, shutdown, and malfunction plan according to the provisions of 63.6(e)(3) of 40 CFR 63.	40 CFR 63 Chapter 18
4	Subpart CCCCC The Emissions Unit No. 032 herein is subject to the requirements as listed in Subpart CCCCC (National Emissions Standards for Hazardous Air Pollutants for Coke Ovens) of Part 63 of Title 40 of the Code of Federal Regulations.	40 CFR 63 Chapter 18
	Section 2 – Emission, Equipment, Production Requirements, Limitations and Work Practice Standards	
5	Subpart CCCCC - Emissions Limitation – PM The permittee shall not discharge to the atmosphere particulate matter from a control device applied to pushing emissions that exceed 0.02 pounds per ton (lb/ton) of coke if a movable hood vented to a stationary control device is used to capture emissions.	40 CFR 63, 63.7290 Chapter 18
6	Subpart CCCCC – Operating Limit For each capture system applied to pushing emissions: A. Maintain the daily average volumetric flowrate at the inlet of the control device at or above the minimum level during the initial performance test, or B. For each capture system that uses an electric motor to drive the fan, the permittee must maintain the daily average fan motor amperes at or above the minimum level established during the initial performance test.	40 CFR 63, 63.7290 Chapter 18

7	Subpart CCCCC – Work Practice Standards The following requirements are to be met for coke oven batteries with vertical flues: A. Observe and record the opacity of fugitive pushing emissions from each oven at least once every 90 days. If an oven cannot be observed during a 90-day period due to circumstances that were not reasonably avoidable, the permittee must observe the opacity of the first push of that oven following the close of the 90-day period that is capable of being observed in accordance with the procedures in 63.7334(a) of 40 CFR 63, and it must be documented why the oven was not observed within the 90-day period. All opacity observations of fugitive pushing emissions for batteries with vertical flues must be made using the procedures in 63.7334(a) of 40 CFR 63. B. If 2 or more batteries are served by the same pushing equipment and total no more than 90 ovens, the batteries as a unit can be considered a single battery. C. The permittee shall observe and record the opacity of fugitive pushing emissions for at least 4 consecutive pushes per battery each day. Exclude any push during which the observer's view is obstructed or obscured by interferences and observe the next available push to complete the set of 4 pushes. The permittee may observe fewer than 4 consecutive pushes, if the observance was reasonably unavoidable; however, the permittee must observe and record as many consecutive pushes as possible and document why 4 consecutive pushes could not be observed. The permittee may observe and record 1 or more non-consecutive pushes in addition to any consecutive pushes observed in a day. D. The permittee shall not alter the pushing schedule to change the sequence of consecutive pushes to be observed on any day. Records are to be maintained indicating legitimate operational reason(s) for any change in the pushing schedule which results in a change in the sequence of consecutive pushes observed in a day.	40 CFR 63, 63.7291 Chapter 18
8	Subpart CCCCC – Fugitive Pushing Emissions; Corrective Action/Increase Coking Time A. In doing pushing observances, if the average opacity for any individual push exceeds 30 % opacity for any short battery (less than 5 meters in height) or 35% opacity for any tall battery, the permittee shall take corrective action and/or increase the coking time for that oven. B. If corrective action or an increase in coking time is required, completing this action or the increase in coking time must occur within 10 calendar days or the number of days determined using Equation 1 under 63.7291 of 40 CFR 63, whichever is greater: $X = 0.55 * Y$ (Eq. 1) Where: X = Number of calendar days allowed to complete corrective action or increase coking time; and Y = Current coking time for the oven, hours. C. Procedures for time periods, days that oven(s) are removed from service, and demonstration that the corrective action and/or increased coking time was successful or unsuccessful are contained in 63.7291(a)(5) and 63.7291(6)(i), of 40 CFR 63. If the corrective action/or increased coking was successful, the permittee may return the oven to the 90-day reading rotation described in 63.7291(a)(1) of 40 CFR 63. D. If the initial corrective action/or increased coking time under 63.7291(6)(i) of 40 CFR 63, were unsuccessful, the permittee must complete additional corrective action and/or increased coking time for that oven within the number of days allowed in 63.7291(a)(5) of 40 CFR 63.	40 CFR 63, 63.7291 Chapter 18

	E. After implementing any additional corrective action/or increased coking time required under 63.7291(a)(6)(i) or (a)(7)(ii) of 40 CFR 63, the permittee shall demonstrate that corrective action/or increased coking time was successful. If the corrective action and/or increased coking time was successful, the permittee may return the oven to the 90-day reading rotation describe in paragraph 63.7291(a)(1) of 40 CFR 63. F. If the corrective action and/or increased coking time was unsuccessful, the permittee must repeat the procedures in 63.7291(a)(6)(i) of 40 CFR 63, until the corrective action and/or increased coking time is successful. G. If at any time the permittee places places an oven on an increased coking time as a result of fugitive emissions exceeding 30% for a short battery or 35% for a tall battery, the permittee shall keep the oven on the increased coking time until the oven qualifies for decreased coking time using the procedures in paragraph 63.7291(a)(7)(ii) or (a)(7)(iii) of 40 CFR 63.	
9	Subpart CCCCC – Fugitive Pushing Emissions; Deviations – Reporting Requirements A. When the permittee's oven(s) fails to meet the standard (extended coking time) average opacity for any individual push that exceeds 30% opacity for any short battery or 35% opacity for any tall battery, the permittee shall report to the permitting authority as a deviation each unsuccessful attempt at corrective action and/or increased coking time under 63.7921(a)(6)(ii) of 40 CFR 63. B. When the permittee's oven(s) fails to meet the standard (decreased coking time) average opacity for any individual push that exceeds 30% opacity for any short battery or 35% opacity for any tall battery, the permittee shall report to the permitting authority as a deviation (63.7921(a)(7)(iv) of 40 CFR 63), the second and any subsequent consecutive unsuccessful attempts on the same oven to quality for decreased coking time as described in 63.7921(a)(7)(iii) of 40 CFR 63.	40 CFR 63, 63.7291(a)(6)(iii), 63.7921(a)(7)(i) and (a)(7)(ii) Chapter 18
10	Subpart CCCCC – Work Practice Standards – Soaking A. Each coke by-product battery is subject to a work practice standard(s) for soaking in accordance with 63.7294 of 40 CFR 63, and each plan must include measures and procedures to: 1. Train topside workers to identify soaking emissions that require corrective action; 2. Damper the oven off the collecting main prior to opening the standpipe cap; 3. Determine the cause of soaking emissions that do not ignite automatically, including emissions from raw COG leaking from the collecting main through the damper, and emissions from incomplete coking; 4. If soaking emissions are caused by leaks from the collecting main, take corrective actions to eliminate the soaking emissions. Suggested methods for corrective actions are contained in 63.7294(a)(4) of 40 CFR 63; and 5. If soaking emissions are not caused by leaks from the collecting main, notify the designated responsible party. If incomplete coking is the cause of the emissions, the permittee must put the oven back on the collecting main until it is completely coked or the permittee must ignite the emissions.	40 CFR 63, 63.7294

	Section 3 -- Compliance and Performance Test Methods and Procedures	
11	Stack Testing For each control device subject to an emissions limit for particulate matter in 63.7290(a) of 40 CFR 63, the permittee shall conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of the Title V operating permit.	40 CFR 63, 63.7322 Chapter 18
12	Stack Test Procedures—Subpart CCCCC The test methods and other procedures for each performance test shall be conducted in accordance with 63.7322 of 40 CFR 63.	40 CFR 63 40 CFR 60, Appendix A
	Section 4—Operation and Maintenance Requirements	
13	Good Engineering Paractices & Minimize Emissions to the Level of Subpart CCCCC A. As required by 63.6(e)(1)(i) of 40 CFR 63, the permittee shall operate and maintain the affected source (batteries), including the air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart. 1. The permittee must prepare and operate at all times according to a written operating and maintenance plan for the general operation and maintenance of the existing by-product coke oven batteries. Each plan associated with pushing must address the following as a minimum: a. Frequency and method of recording underfire gas parameters, b. Frequency and method of recording battery operating temperature, including measurement of individual flue and cross-wall temperatures, c. Procedures to prevent pushing an oven before it is fully coked, d. Procedures to prevent overcharging and undercharging of ovens, including measurement of coal moisture, coal bulk density, and procedures for determining volume of coal charged, e. Frequency and procedures for inspecting flues, burners, and nozzles, f. The operating and maintenance plan must include requirements to repair any defects or deficiencies brought on through inspections as describe in Permit Condition 15 of this emissions unit. Repairs are to be made before the next schedule inspection. g. For each baghouse applied to pushing emissions, the permittee shall install, operate, and maintain each bag leak detection system according to 63.7331 of 40 CFR 63.	40 CFR 63, 63.7300 63.7331 Chapter 18
	Section 5 -- Continuous Emission Monitoring	
14	Continuous Compliance Requirements—Monitoring For each baghouse applied to pushing emissions from a coke oven battery, the permittee shall continuously monitor the relative change in particulate matter loading using a bag leak detection system according to requirements in 63.7331(a) of 40 CFR 63 and conduct inspections at their specified frequency according to the requirements as follows: 1. Monitor the pressure drop across each baghouse cell each day to ensure the pressure drop is within the normal operating range. 2. Confirm that dust is being removed from the hoppers through weekly visual inspections or equivalent methods of assurance. 3. Check the compressed air supply for pulse-jet baghouses each day. 4. Monitor cleaning cycles. 5. Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means. 6. Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks 7. Inspect fans for wear. 8. If the permittee elects the operating limit in 63.7290(b)(3)(i) of 40 CFR 63 for a	40 CFR 63, 63.7330 Chapter 18

	capture system applied to pushing emissions, the permittee shall install, operate, and maintain a device to measure fan motor amperage. Refer to 63.7331(g) of 40 CFR 63, for this requirement. 9. If the permittee elects the operating limit in 63.7290(b)(3(ii) of 40 CFR 63, for a capture system applied to pushing emissions, the permittee shall install, operate, and maintain a device to measure the fan motor amperes.	
15	Push Control System—Inspections and Preventive Maintenance A. The permittee shall prepare and operate at all times according to a written operating and maintenance plan for each capture system and control device applied to pushing emissions. Each plan must address at a minimum the following elements: 1. Monthly inspections of the equipment that are important to the performance of the total capture system (e.g., pressure sensors, dampers, and damper switches); These inspections must include observations of the physical appearance of the equipment (e.g., holes in ductwork or hoods, flow restrictions such a dents and soot bridging, and fan erosion). 2. Preventive maintenance for each control device, including a preventive maintenance schedule; and 3. Corrective action for all baghouses applied to pushing emissions in the event a bag leak detection system alarm is triggered, the permittee must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable.	40 CFR 63 Chapter 18
	Section 6 – Recordkeeping and Reporting Requirements	
16	Department Required Annual Report Requirement The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation; B. For each battery, the total quantity in tons of coal charged, coke produced specifying amounts in tons for both furnace and foundry; and C The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations.	1.5.15 2.1.3 18.5.3
17	Subpart CCCCC—Reporting Requirements The permittee shall submit semiannual compliance reports each year unless notified otherwise. Each compliance report must provide information on compliance with the emissions limitations, work practice standards, and operation and maintenance requirements for all affected sources. Reporting shall be in accordance with 63.7341 of 40 CFR 63.	40 CFR 63 Chapter 18

18	Subpart CCCCC—Recordkeeping The permittee shall keep records in accordance with the following: A. A copy of each notification and report that the permittee submitted to comply with the subpart, including all documentation supporting any initial notification of compliance status that was submitted by the permittee, and according to the requirements in 63.10(b)(2))(xiv) of 40 CFR 63; B. The records in 63.6(e)(3)(iii) through (v) of 40 CFR 63 related to startup, shutdown, and malfunction; C. Records of performance tests, performance evaluations, and opacity observations as required in 63.10(b)(2)(viii) of 40 CFR 63; D. The permittee shall keep records in 63.6(h)(6) of 40 CFR 63, for visual observations. E. The permittee shall keep records required in 63.7333 through 63.7335 of 40 CFR 63 to show continuous compliance with each emissions limitation, work practice standard, and operation and maintenance requirement that applies.	40 CFR 63, 63.7342 Chapter 18
19	Subpart CCCCC—Record Retention The permittee shall keep records in a form suitable and readily available for expeditious review, according to 63.10(b)(1) of 40 CFR 63. As specified in 63.10(b)(1) of 40 CFR 63, the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record. The permittee shall keep each record onsite for a least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record in accordance with 63.10(b)(1) of 40 CFR 63. The permittee can keep the records offsite for the remaining 3 years.	40 CFR 63, 63.7343 Chapter 18

Emissions Unit Operating Permit Summary

Emissions Unit No.: 034

Company: ABC Coke

Source Description: Ammonium Sulfate Manufacturing

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used:
Primary: N/A
Secondary: N/A

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Particulate Matter (PM)	17.19 pounds per hour (12.5 tons/hr process rate)	Part 6.4
Particulate Matter (PM)	0.30 lb/ton of ammonium sulfate produced	Subpart PP
Visible Emissions (VE)	15% Opacity (exhaust gases)	Subpart PP

Pollution Control Device: Baghouse

Continuous Emission Monitors: None

Continuous Compliance Determiner: Monitoring of Operation Per Subpart PP

Title V Monitoring: Condition 2

EPA Reference Test Methods: 40 CFR 60, Appendix A

Reporting Requirements: Condition No. 6

Applicable Regulations: Section 1.5.15; Section 2.1.3; Part 6.1;Section 6.1.1; Part 6.2; Part 18.5 Section 18.5.3; Chapter 18, 40 CFR 60

No.	Permit Conditions for Emissions Unit No. 034	Regulation
	Section 1 – Applicability	
1	The emissions unit is subject to Part 6.1, entitled "Visible Emissions," of the Rules and Regulations. The emissions unit is subject to the particulate emission rate allowed under Part 6.2, entitled "Fugitive Dust" of the Rules and Regulations.	2.1.3 6.1 6.2 Chapter 18
	Section 2 -- Emission, Equipment or Production Requirements and Limitations	
2	Visible Emissions Restriction The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60. To comply with Title V emissions monitoring requirements, the permittee shall perform a visual observation of the emission unit's exhaust system and make a record of the visual observation at least once per month. If any visible emissions are observed, the permittee shall correct the problem causing the emission unit to emit visible emissions and make a record of the event and the corrective actions. The permittee shall make such repairs within 1 calendar month of the observation.	2.1.3 6.1.1 18.5
3	Subpart PP-Standards for Particulate Matter (PM) The permittee's ammonium sulfate dryer that is subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any ammonium sulfate dryer particulate matter at an emission rate exceeding 0.30 pounds of particulate matter (PM) per ton of ammonium sulfate produced and exhaust gases exhibiting more than 15% opacity.	40 CFR 60, Subpart PP
	Section 3 -- Compliance and Performance Test Methods and Procedures	
4	Test Methods and Procedures The permittee shall determine compliance with the visible emissions restrictions of this permit by the following EPA's reference methods under 40 CFR 60, Appendix A, July 1, 2008, as the same may be amended or revised: Method 5: Determination of Particulate Matter Emissions From Stationary Sources Method 9: Visual Determination of the Opacity of Emissions Method 22: Visual Determination of Fugitive Emissions	2.1.3 40 CFR 60
	Section 4 – Continuous Emission Monitoring – Not Applicable	
	Section 5-Compliance Assurance Monitoring	
5	Monitoring of Operations A. The permittee shall install, calibrate, maintain, and operate flow monitoring devices which can be used to determine the mass flow of ammonium sulfate deed material streams to the process. The flow monitoring device shall have an accuracy of ± 5% over its operating range. However, if the plant uses weigh scales of the same accuracy to directly measure production rate(s) of ammonium sulfate, the use of flow monitoring devices is not required. B. The permittee shall install, calibrate, maintain, and operate a monitoring device which continuously measures and permanently records the total pressure drop across the emission control system. The monitoring device shall have an accuracy of ± 5% over its operating range.	40 CFR 60, Subpart PP

	Section 6 -- Recordkeeping and Reporting Requirements	
6	Department Required Annual Report Requirement The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation of the ammonium sulfate manufacturing system; B. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations; and C. The quantity of material processed annually.	1.5.15 2.1.3 18.5.3

Permit Package

The following highlighted items are enclosed in this package.

COVER LETTER TO ADEM

COVER LETTER TO SOURCE

COVER LETTER TO EPA

DRAFT PERMIT

FINAL PERMIT

PUBLIC NOTICE

SUMMARY FORMS – TITLE V ONLY

ENGINEERING EVALUATION

PERMIT STATUS ROUTING FORM

FEE SCHEDULE

PERMIT APPLICATION DATA ENTRY FORM

INVOICE (PRINT OUT FROM COMPUTER)

PSD NITROGEN DIOXIDE TRACKING SYSTEM FORM

CUMULATIVE VOC TRACKING FORM

Jefferson County Department of Health
Air Pollution Control Program

Permit Application Data Entry Form
(Air Database Screen 119)

Action: ___ **[Q, A, M, U, D, C, N] (A- Add new App, U- Update Events, M- Modify Basic App. Info.)**

Plant ID Nbr: CCCCC1 **Application Control Nbr:** 10000007

Plant Name: ABC Coke **Assigned To:** MALICA

Comment: _____

Permit App. Class: MS **(MS- Major Source, SM- Synthetic Minor, MN- Minor Point Source)**

Update Cat: RE **(ES- Existing Source Initial App, NS- New Source, MD- Major Modification, MN- Minor Modification, RE- Title V Renewal)**

App. Received Date: 8/19/08 **Subject to Title V (y/n):** Y

Permit Application Events

Event Code	Permit Event Description	Event Date	Performed By: (Employee #)	Entered By: (Emp. Initial)
PAR	Received Application	8/19/08	254	Cm
PDP	SCDH Drafts Permit	9/24/08	019	BA
PXZ	Draft Permit Mailed to ADEM	9/24/08	356	DGH
PZZ	Draft Permit Mailed to EPA	9/24/08	356	DGH
PDS	Public Notice of Draft Permit	9/27/08	356	DGH
PF	Final Permit Issued	11/19/08	356	DGH

(Permit Numbers, Review, and Event Codes on Back)

Permit Numbers: Must be provided with the entry of a Draft Permit event code. All permit numbers begin with "407". For MS & SM permits, enter the 4 digit Facility ID Nbr. only. For MN source Air Permits, enter the 4 digit Facility Nbr. and the 3 digit Point Nbr. The 2 digit Sequence Nbr. is provided by the system.

Draft MS/SM Permit Nbr: 407 - _____ - ## (Enter with Action Codes PDP or PDQ)

Draft MN Air Permit Nbr: 407 - _____ - _____ - ## (Minor Point Source Air Permits w/PDP or PDQ)

Application Review For:

SIP___ NSR___ NSPS___ NESHAP___ PSD___ TV___ Acid R___ MACT___ RACT___

BACT___ LAER___ Offset___ Other_____

Permit Application Action Codes	**(All Applicable Actions Are Required)**
PAA – Administrative Amendment (TV Only)	PXZ – Draft Permit Mailed to ADEM
PAL - Additional Information Requested	PZZ - Proposed Permit Mailed EPA (TV Only)
PAO - Additional Information Received ***	PPP - EPA Receives Proposed Permit (TV Only)
PAC - Application Determined Complete	PPM - EPA Receives Proposed Modification (TV)
PAD - Application Complete By Default	PPO - EPA Objects To Proposed Permit (TV Only)
PAI - Application Incomplete	PPL - EPA Objects To Proposed Modification (TV)
PAP – JCDH Rejects Application (Closes App.)	PIF - JCDH Issues Final Permit (Closes App.)
PAW- Application Withdrawn (Closes App.)	PIM - JCDH Issues Modified Permit (Closes App.)
PAZ – Application Not Required (Closes App.)	PDY - Public Comments On Draft
PDP - JCDH Drafts Permit	PPG - EPA Denies Proposed Permit (TV Only)
PDQ- JCDH Drafts Modification	PPT - Public Petition To EPA (TV Only)
PDS - Public Notice Of Draft Permit	PPZ - EPA Approves Proposed Permit (TV Only)
PDV- Public Hearing On Draft Permit	
PPN - EPA Notified / Proposed Permit **(TV Only)	
PAR – Permit Application Received ----------	(System Generated w/ Add new Application)
PDR – Public Review Period Ends----------	(System Generated w/ Public Notice "PDS" Entry)
PPE – EPA Review Period Ends----------	(System Generated w/ EPA Receives..."PPP" Entry)
PPF – Public Petition Ends----------	(System Generated w/ Pub. Petition..."PPT" Entry)
66– NSR Air Permit Issued ("MN" Only)----------	(System Generated w/ Final Permit... "PIF" Entry)
75- Air Permit Issued - Non-NSR ("MN" Only)-----	(System Generated w/ Final Permit... "PIF" Entry)
PIX – Permit Expires----------	(System Generated w/ Expire Date Entry @ Permit)

** Required For App. For Minor Modification of Title V Permit

*** Enter Only For Information Required For Completeness Determination (Resets Dates)

JEFFERSON COUNTY DEPARTMENT OF HEALTH
Environmental Health Services
Air and Radiation Protection Division
P.O. Box 2648, Birmingham, AL 35202 (205)933-9110

Issued 11/17/08

Permit Status / Routing Form

Facility ABC Coke Control # 08000007

Permit Number:

4-07-0001-02

Description of Source:

Coke By-Products MFG

Permit applied for due to

- ☑ New Construction
- ☐ Modification of Existing Source
- ☐ Startup of Existing Source
- ☑ Existing Facility
- ☐ Name / Ownership Change
- ☐ Location Change
- ☐ Other (Explain)

Specify Pollutants and Applicable Regulations _____

Special Permit Conditions Required For:

- ☑ Avoid PSD Review
- ☐ Avoid Offset Review
- ☐ Avoid Construction Moratorium
- ☐ Meet Requirements of PSD
- ☐ Meet Requirements of Offset
- ☑ NSPS Requirements
- ☑ NESHAPS Requirements
- ☐ Fug. Dust / Emissions Enforcement

Routing:	Date*	Initial:
Received application	8/19/08	DGH
Preliminary review completed		
Final review report finished and typed	9/24/08	—
Modeling review (If applicable)		
All materials / fees received	8/19/08	DGH
Requested more information / fees from state source *960.00 Invoice for $1305.00 9/24/08 per B. Allen DGH	9-11-08	DGH
Permit review package / Copy of applications sent to ADEM	9/24/08	DGH
Permit review package / Copy of applications / Public notice sent to EPA	9/24/08	DGH
Permit review package sent to source (Title V only)		
Comments received from ADEM		
Comments received from EPA		
Public comment: Begins 09/29/08 Ends 10/28/09	9/24/08	DGH
Changes made to permit or review report (if applicable)		
Permit sent to source	11-19-08	DGH
Permit data entered on CDS, on-line, NEDS, computer forms		

*If the subject date is greater than 10 days from previous date, explain below.

Comments _____